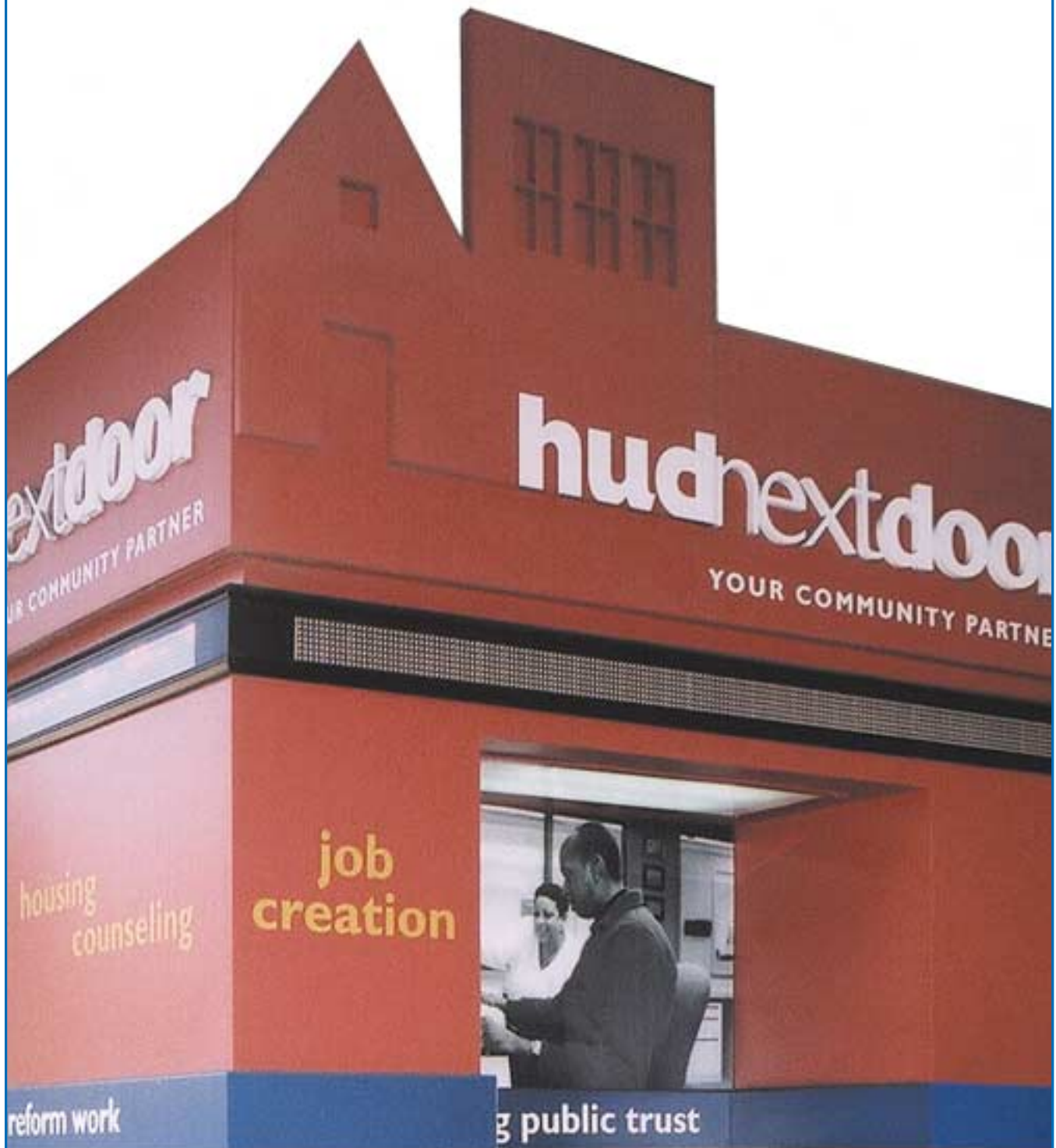


Electronic Government Strategic Plan

Fiscal Years 2001-2005

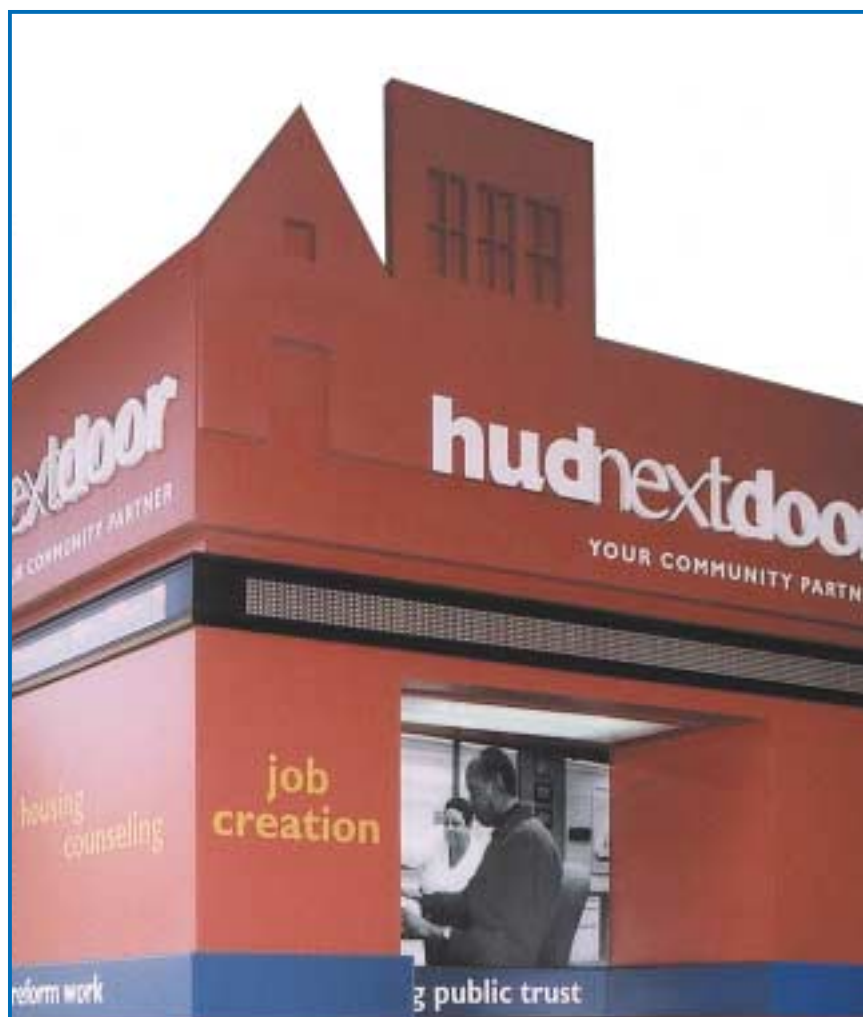


February 2001

U.S. Department of Housing and Urban Development
Office of the Chief Information Officer

Electronic Government Strategic Plan

Fiscal Years 2001-2005



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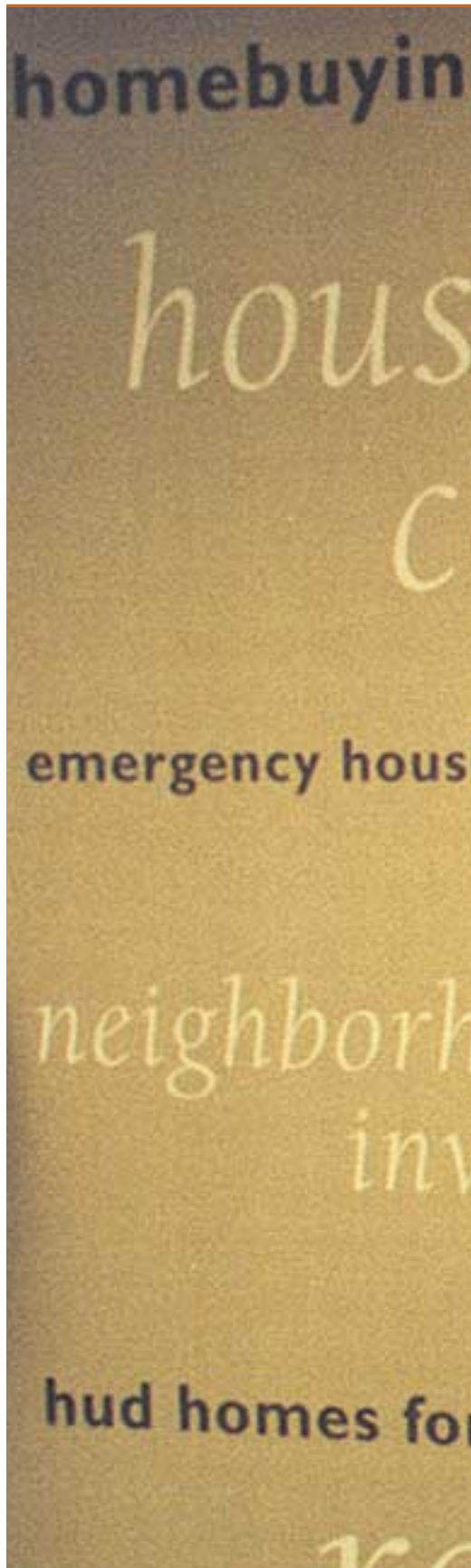


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Message from the Chief Information Officer

As technology continues to reshape our world, HUD must be prepared to meet and exceed the rising expectations of our business partners and the citizens we serve. It is not enough to keep up with industry trends. We must position HUD as a pioneer on the forefront of eGovernment.

Congress has emphasized the need to meet this challenge by enacting legislation that requires Federal agencies to provide citizens and business partners the option of interacting with agencies in a fully electronic environment by 2003, as specified in the Government Paperwork Elimination Act (GPEA).

Electronic Government is about more than technology — it's transforming the way HUD does business. It's about enabling our people to process less paper and move into more customer-facing roles that provide increased levels of service. It's about formulating the answers before the questions are even asked.

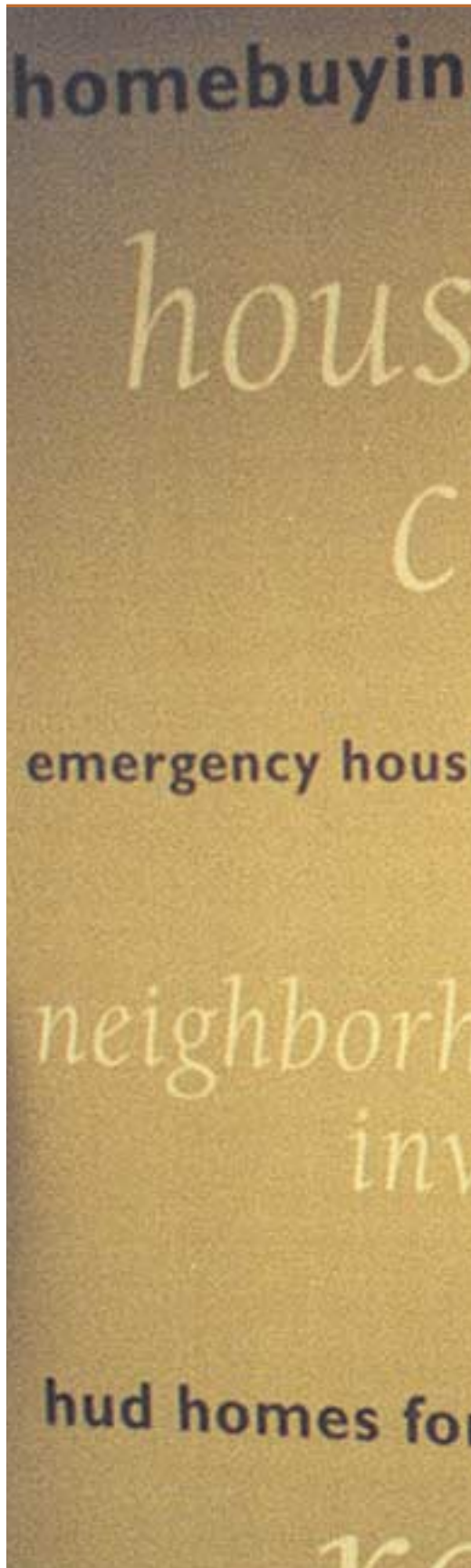
This Strategic Plan defines where we are and where we need to go in eGovernment. We already have an excellent record in eGovernment at HUD. From the Real Estate Assessment Center to FHA Connection, from Native eDGE to www.hud.gov and HUDweb, our efforts have garnered prestigious acknowledgements and numerous Federal and industry awards. But we must challenge ourselves to do more if HUD is to remain relevant in the growing "eEconomy."

We must commit ourselves to new ways of fundamentally transforming how HUD conducts its business — new ways of empowering citizens, helping our business partners be more efficient and effective, and enabling our employees to spend more time on value-added activities.

I look forward to working with you in this critical effort to achieve continued success for HUD in today's dynamic eGovernment environment.

Gloria R. Parker

Chief Information Officer
U.S. Department of Housing and Urban Development



Preface

Purpose

The purpose of the Department of Housing and Urban Development's (HUD's) Electronic Government (i.e., eGovernment) Strategic Plan is to define HUD's vision for the use of electronic commerce (i.e., eCommerce) for the next five years (FY 2001-2005).

The HUD eGovernment Strategic Plan:

- Defines HUD's eGovernment mission;
- Describes the goals and objectives supporting that mission;
- Presents high-level implementation strategies; and
- Identifies the required capabilities for successful implementation.

In essence, it provides a roadmap for enhancing HUD's leadership in eGovernment to better serve citizens and business partners, and to restore public trust by streamlining core business processes and giving employees the tools and information they need. The Plan boldly asserts that eGovernment is essential for HUD to continue to fulfill its mission and maximize the Department's positive impact on our nation's economy and social fabric.

The Plan is a living document that will be revised regularly and integrated into planning and budgeting processes across the Department. Rather than defining a comprehensive course of action, it constitutes an emphatic acknowledgment that HUD has a pivotal role to play as both an enabler of electronic commerce in the general economy and as an innovator of eGovernment.

From the outset, it must be underscored that this is a strategic plan, not a project plan; directional, not directive; and aspirational, not absolute. Our ability to accomplish the ambitious vision we have laid out in the short- and long-term is wholly dependent upon adequate funding for Internet infrastructure improvements, a sound enterprise architecture, human and financial capital to develop and maintain what we build, participation from our business partners, and the continued commitment and active leadership of HUD executives. All of these ingredients are prerequisites for achieving our eGovernment goals and objectives, and represent the elemental building blocks undergirding our current capabilities and future initiatives.

The Plan provides a baseline of HUD's current eGovernment capabilities, outlines short-term initiatives complementing these efforts, and

advances broader long-term opportunities. It organizes current and prospective activities first by overarching goals and then by specific objectives. The Plan also recommends a phased implementation path and outlines the capabilities required to realize HUD's eGovernment goals.

To develop the Plan, HUD formed an enterprise-wide eGovernment Working Group (EGWG) comprised of representatives from all major program offices; conducted visioning sessions with employees and managers at all levels; studied best practices in the public and private sector; and gained support from executive management. The Plan is consistent with HUD's FY 2000-2006 Strategic Plan, HUD 2020 Management Reform, and the President's 1999 Directive on eGovernment. The Plan also supports the Government Paperwork Elimination Act (GPEA), Government Performance and Results Act (GPRA), Clinger-Cohen Act, Paperwork Reduction Act, and other legislative requirements.

Please feel free to provide comments and recommendations for future updates to: HUD_eGov_Team@hud.gov.

Defining eGovernment

eGovernment is eCommerce as applied to the public sector. eGovernment is the interchange of value, including goods, services, and information, through an electronic medium, and includes interactions and relationships between:

- *Government and citizens,*
- *Government and nonprofits,*
- *Government and business,*
- *Government and employees, and*
- *Government and Government.*

Executive Summary

As citizens and HUD's business partners increasingly use electronic technologies to transact business faster and less expensively, they expect and demand to conduct business with HUD and other government agencies in the same manner.

The eGovernment Strategic Plan presents a visionary strategy for meeting these expectations by transforming the way HUD does business. The Plan responds to these challenges by establishing a mission for eGovernment (i.e., eHUD) to promote healthy homes and viable communities by leveraging electronic commerce to empower citizens, business partners, and employees to transact business and gain the knowledge they need in the eEconomy.

The complementary vision for eHUD is to be a knowledge-driven leader in eGovernment and provide the highest levels of citizen service by fundamentally transforming our business, creating innovative partnerships, and focusing on value-added, integrated solutions.

As an established leader in eGovernment, HUD must now move decisively to:

- Anticipate and act on the changes rampant in the rapidly expanding digital economy;
- Meet and exceed the rising expectations of citizens and business partners; and
- Fulfill legislative requirements for eGovernment.

Link to HUD Strategic Planning

HUD's eGovernment Strategic Plan builds on the fundamental elements of HUD's mission, vision, and strategic goals. The Department's mission is to promote adequate and affordable housing, economic opportunity, and a suitable living environment free from discrimination.

HUD's accompanying vision is to be a high-performing, well-respected, and empowering partner with all levels of government, with the private sector, and with families and individuals. The mission and vision for eHUD were derived directly from these overall guiding statements.

eHUD Strategic Goals

Similarly, the strategic goals established for eHUD link directly to HUD's overall strategic goals. The following are the three strategic goals for eHUD:



1. Improve housing opportunities, self-sufficiency, and quality of life for citizens and HUD beneficiaries by leveraging electronic commerce to meet their needs directly;
2. Ensure HUD's business partners have the needed tools to deliver HUD products and services effectively and efficiently in a virtual environment; and
3. Restore the public trust by utilizing technology to operate a productive and responsive enterprise.

These goals do not imply that all of HUD's transactions with citizens and business partners will be conducted online. First and foremost, HUD is a business about and for people; the human element in HUD's services will neither be diminished nor displaced by the Internet. However, the Internet is a prominent channel for service and product delivery that HUD must embrace. Web-based technology will be used to support, supplement, and enhance the more meaningful personal interactions between citizens, business partners, and HUD employees.

Building on the Government Paperwork Elimination Act (GPEA)

GPEA sets the framework upon which eHUD must be built. GPEA serves as an official driver to ensure that eGovernment continues to evolve, provides specific technology options that must be explored, and establishes guidelines to develop fully electronic transactions.

HUD's eGovernment Strategic Plan fully captures the intent of the legislation and extends beyond the legislative mandates to produce a comprehensive vision for how electronic technologies can transform the Department.

As HUD develops procedures for citizens and business partners to do business with the Department via eGovernment technologies, the provisions set forth by GPEA will directly help achieve all three eHUD strategic goals. The Plan specifies short- and long-term initiatives for each goal that provide comprehensive solutions which inherently fulfill the mandates of GPEA.

If these goals are achieved, citizens will have a wide range of electronic options for finding and obtaining housing and conducting end-to-end transactions with HUD. Likewise, business partners will be able to conduct day-to-day business with HUD via the Internet, including submitting compliance documentation, applying for grants, and requesting information. HUD and its employees will directly benefit by effectively leveraging electronic records and data maintenance. Furthermore, online information exchange will automate tedious and mundane paper-processing, and free employees to provide more value-added services.

In a fully transformed eHUD:

- New portal technologies would enable better integration with lenders, brokers, and other business partners, as well as provide one-stop solutions for citizens.
- New payment systems would provide faster and more efficient means to settle accounts with suppliers and contractors and disburse Federal funds to grantees.
- New interactive database capabilities and hand-held technologies would provide opportunities to better enforce housing laws, monitor compliance, and reduce fraud, waste, and abuse.

Organization of the eGovernment Strategic Plan

In order to paint a clear picture of where HUD is now and where it needs to go, we have organized this Plan by the three eHUD strategic goals, describing how each goal can be achieved to fulfill the eHUD mission. Each goal is broken down into four distinct objectives for which we have defined targeted outcomes, project initiatives, and high-level performance measures. Each objective highlights current eGovernment capabilities and prospective short- and long-term initiatives. Short-term initiatives are either already planned for implementation or feasibly can be implemented by the end of FY 2003. Long-term opportunities, which are more extensive and far-reaching, may be achieved by the end of FY 2005. See Figure 1, HUD eGovernment Strategic Plan Organization.

In keeping with HUD's guiding principles, the Plan provides comprehensive solutions and approaches that are community-driven and collaborative. The initiatives nurture self-sufficiency and self-reliance by directly helping people become more productive citizens. Instead of creating new bureaucracy, the initiatives will be centered on seeking community and industry partnerships and, when possible, leveraging market-driven solutions.

By outlining end-to-end solutions (including several Internet portals) based on the needs of particular customer groups and by streamlining back-office processes, HUD has established a commitment to provide comprehensive government solutions for its beneficiaries, business partners, and employees. The eGovernment solutions described in this Plan should provide faster, more efficient, and effective government operations.

The Right Environment

For HUD's eGovernment efforts to succeed, we must address a number of people and technology issues. Transforming HUD through eGovernment will require:

- A measurable and attainable timeline;
- An integrated Information Technology (IT) Capital Planning process that prioritizes eGovernment initiatives;
- A structured, established Enterprise Architecture;
- A sound information technology infrastructure that supports Internet development and implementation;
- Specific security, privacy, and accessibility policies;
- Business Process Improvement efforts;
- Effective data management;
- Established roles and responsibilities;
- Citizens, business partners, and employees with an awareness and understanding of the services eGovernment can provide;
- Business partner and industry cooperation; and
- Continued executive sponsorship.

We must build on our successes, incorporate best practices, and create new, integrated solutions for HUD's citizens, business partners, and employees. All of these are achievable with the right plan and the necessary support.

Figure 1. HUD eGovernment Strategic Plan Organization

eHUD Strategic Goals	eHUD Strategic Objectives	eHUD Strategic Initiatives
1. Improve housing opportunities, self-sufficiency, and quality of life for citizens and HUD beneficiaries by leveraging electronic commerce to meet their needs directly.	<p>1.1 Increase homeownership, the availability of affordable rental housing, and equal opportunity by utilizing web-based technology to assist citizens in need.</p> <p>1.2 Help bridge the digital divide by increasing access, knowledge, skills, and usage of technology by low-income citizens and HUD beneficiaries.</p> <p>1.3 Utilize the Internet to foster asset development and self-sufficiency through education, job training, and job placement opportunities for Section 8 and Public Housing residents.</p> <p>1.4 Satisfy emergency and temporary housing needs with real-time information and technology.</p>	<ul style="list-style-type: none"> • First-Time Homebuyers Portal • Internet Access in Neighborhood Networks • Sharing Technology • Anti-Discrimination Campaign • Rent.HUD.gov • eVoucher System • Buying/Selling Homes Directly to Citizens • Temporary Shelter Search • Financial Management and Job Placement Tools
2. Ensure HUD's business partners have the needed tools to deliver HUD products and services effectively and efficiently in a virtual environment.	<p>2.1 Provide real-time, accurate information exchange, interactive communication, and seamless integration between HUD and its business partners.</p> <p>2.2 Increase awareness of eCommerce and the availability of useful technology for grantees, Public Housing Authorities, and other community and faith-based organizations.</p> <p>2.3 Enhance and facilitate transactions between and among HUD's business partners and customers.</p> <p>2.4 Lead intergovernmental efforts, where appropriate, to better serve citizens and business partners.</p>	<ul style="list-style-type: none"> • Empowerment Information System (EIS) • Paperless FHA Insurance • Federal One-Stop Shopping Initiatives • Departmental Grants Management System • Community Development Portal • Multifamily Integration • Online Research Collaboration • Online Work Applications • Connecting with HUD
3. Restore the public trust by utilizing technology to operate a productive and responsive enterprise.	<p>3.1 Integrate front- and back-end business processes to allow seamless eGovernment activity and reduce paper-processing.</p> <p>3.2 Improve the stewardship of HUD's resources by eliminating fraud, waste, abuse, and operational inefficiency.</p> <p>3.3 Create a dynamic work environment by fostering collaboration and team-work, and improving technology and business integration throughout the Department.</p> <p>3.4 Increase HUD employees' understanding and usage of eGovernment and Internet technology.</p>	<ul style="list-style-type: none"> • Electronic Concurrence System • Virtual University • Registration for Training • eProcurement • Lender Assessment • Online Job Applications • Digital Cameras/Video • Travel Management System • Virtual Teams • Integrated Knowledge Management System • Integrated Human Resources • Integrated Financial Management • Lead-based Paint Inspections • HUD-owned Property Inspections • Davis-Bacon Act Wage Matching

HUD Strategic Overview

The Role of HUD in America

HUD's mission speaks to several fundamental tenets of the American Dream, namely, homeownership, self-sufficiency, inclusion, and stewardship. To the benefit of American families, workers and companies, and the investment community, HUD plays a pivotal role in promoting adequate and affordable housing for all. HUD Headquarters and 81 field offices work to improve communities and foster economic opportunity in partnership with citizens, counties, states, lenders, neighborhood- and faith-based nonprofits, and the housing industry.

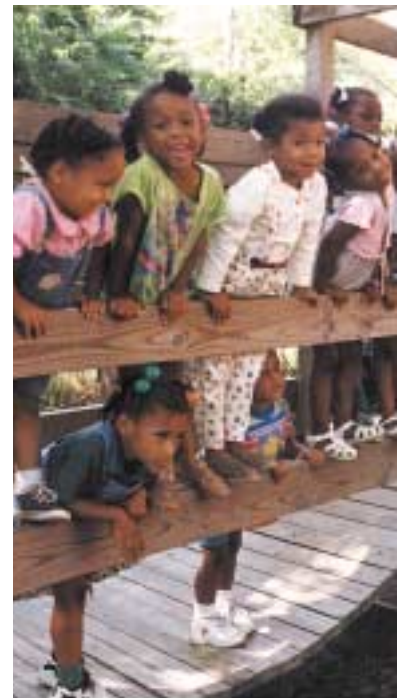


At the dawn of a new millennium, the United States is enjoying the longest economic expansion in its history. Total investments and other expenditures in the housing industry make up almost 10% of the US economy. HUD facilitates homeownership and affordable rental housing, fosters individual self-sufficiency through asset and skills development, and encourages greater access to capital and private sector investment. HUD is central to the housing industry and, in turn, to our national economy.

Moreover, America's continued competitiveness and preeminence depends on ensuring the American Dream is attainable by all in our society. By addressing the needs of the nation's most challenged communities, HUD will continue to play an integral role in propagating the American Dream, social cohesion, and economic prosperity.

What Does HUD Do?

HUD will utilize a \$32.4 billion budget (FY2001) through six major program offices and their support offices. These six program offices include Public and Indian Housing (PIH), Housing, the Government National Mortgage Association (GNMA), Fair Housing and Equal Opportunity (FHEO), Community Planning and Development (CPD), and the Office of Multifamily Housing Assistance Restructuring (OMHAR).



Major services include:

- Insuring loans for first-time and low-income homebuyers to increase access to the benefits of homeownership;
- Insuring loans to multifamily owners to increase the availability of affordable rental housing;
- Providing grants to nonprofits, communities, and local governments to help meet locally-defined needs for housing, economic development and infrastructure, as well as a full range of assistance to the homeless;
- Increasing capital available to citizens by channeling funds from investors to securitize new mortgages, thereby providing liquidity for lenders;
- Providing housing vouchers that give families access to safe and decent housing;
- Enforcing fair housing laws to ensure equal opportunity in homeownership and rental housing;
- Supporting the nation's Public Housing Authorities (PHAs) in providing housing for poor and disadvantaged families;
- Helping families and individuals achieve self-sufficiency by providing housing assistance, job training, and other supportive services; and
- Providing housing-related assistance for people who are elderly, disabled, or diagnosed with HIV/AIDS.



HUD's Mission and Vision

HUD's Mission

Promote adequate and affordable housing, economic opportunity, and a suitable living environment free from discrimination.

HUD's Vision

To be a high-performing, well-respected, and empowering partner with all levels of government, with the private sector, and with families and individuals.

As articulated in the Department's FY 2000-2006 Strategic Plan and FY 2001 Annual Performance Plan, HUD has dramatically transformed and restructured itself in recent years by focusing on improving customer service and restoring public trust through the elimination of fraud, waste, and abuse. A complete listing of HUD's Strategic Goals and Objectives can be found in Appendix B. The Department has placed renewed emphasis on empowering citizens and communities and taking holistic approaches to urban development, both of which represent dramatic paradigm shifts for the organization.

This Departmental change in philosophy and strategic intent is supported by five key guiding principles, that resonate with the promise and purpose of eGovernment to:

- Foster bottom-up, community-driven, and comprehensive approaches;
- Nurture self-sufficiency and self-reliance by directly helping people and families become productive, taxpaying citizens;
- Collaborate with other Federal agencies to provide vital community resources;
- Seek out community partnerships for new programs instead of creating new bureaucracy; and
- Pursue market-driven approaches, whenever possible.

Mandate for Change

The Internet is transforming everything that affects HUD's universe: the American economy, the housing industry, HUD's customers and business partners, and the way government operates.

The Internet, a potent tool for change, has given rise to a new economy; radically altered the housing industry; and raised the expectations of citizens and HUD business partners in ways that cannot be ignored.

Institutional and individual winners and losers are already being determined by their facility with new technologies and acceptance of accompanying change. HUD has the opportunity to use the Internet and related new technologies to greatly improve the efficiency, effectiveness, and impact of government. Tapping the Internet's potential can also diminish socioeconomic disparities and enhance self-sufficiency.

Promise of the New Economy

The burgeoning digital economy is built on two key pillars: transporting information and creating knowledge. Like the Industrial Revolution, this new technology-driven economy is powering change throughout our society. Fundamentally, the Internet makes interactions faster, location irrelevant, and transactions cheaper. It can potentially remove physical, racial, and psychological barriers; and help communities interact, people find jobs, and families understand their options for financial management and asset creation. As shown in Figure 2, the estimated growth of the online market is exponential. Perhaps most significant is that more than half the population is expected to be online, using the Internet, by 2003.

Figure 2. Exponential Growth of U.S. Online Market

Internet Usage	2000	2003
Business to Business	\$97.3B	\$633.7B
Business to Consumer	\$35.8B	\$75.0B
Number of Online Users	103.0M	176.9M
Number of Online Customers	41.2M	72.1M
% of Population Online	37.5%	53.1%

Source: Jupiter

Taking advantage of this phenomenon, government can reach citizens and business partners directly by breaking down organizational and geographic barriers against cooperation and collaboration.

Reshaping an Industry

In order to remain relevant to citizens' needs, HUD, like all agencies, must focus on keeping up with and surpassing the private sector's use of technology. Current housing industry trends represent (1) a real threat that may allow others to capitalize on new, sophisticated Internet technologies to perform HUD's role more effectively; and (2) a unique, exciting opportunity for HUD to establish new partnerships, increase its value to citizens, and create a new image for the Department.



While the housing industry overall has expanded, it continues to face the consolidation of major players who are seeking economies of scope and scale. Simultaneously, the Internet is rapidly reshaping the housing industry as a whole. The Internet has allowed for new sources of value in the market and created two dominant trends in the industry: (1) the disintermediation of middlemen, such as realtors; and (2) the aggregation of information and resources by established groups.

In housing, the Internet causes disintermediation because it removes the physical barriers between buyers and sellers, reduces search costs, and virtually eliminates information-related price distortions. With better, faster information about pricing and processes, consumers are more comfortable buying and selling homes without a realtor or broker and are less inclined to use middlemen unless there is an obvious added value.

As the traditional roles of middlemen shift, the industry is experiencing a rise in independent third-party players serving as “aggregators” and “integrators” of information and resources that bring suppliers, contractors, brokers, and lenders under one umbrella. Both savvy middle players in the housing market and completely new enterprises now offer comprehensive, end-to-end solutions for homebuying, furnishings and home improvement, securing apartments, moving, construction and repairs, financial management, insurance, and processing consumer loans and commercial securities.

Implications of the Internet in the Housing and Real Estate Industry

Consumer Empowerment

- Large volumes of free real estate information are increasing the power of the consumer. Consumers can access extensive property listings in a variety of state, local, franchise, company, broker, licensee, and newspaper sites without assistance.
- Educated customers now show brokers their options and force them to use the Internet to their advantage.
- Consumer and commercial lending, bill payment, and banking are increasingly becoming electronic.

Changing Realtor Roles

- Automated Internet substitutes are replacing traditional real estate functions.
- Sites with discounted services represent financial threats to independent contractors working on commission.
- Increased numbers of For Sale By Owner (FSBO) homes reduce the need for real estate licensees.

Brand Influence

- Consumers' trust in large brand names such as Homestore.com and Microsoft Home Advisor limits successful marketing by independent service providers.
- The online housing industry relies on strategic partnerships with top-rated portals such as Excite, America Online, Netscape, Go Network, and Lycos to drive traffic to their sites.

Information on electronic best practices in the housing industry, including Microsoft Home Advisor, Realtor.com, Quicken.com, apartmentsearch.com, and rent.net is available in Appendix D.

Implications of the Internet in Communities

As physical boundaries become less important because of virtual communities, HUD, the agency charged with community development, must be prepared to respond. Working collaboratively with community development partners, HUD must provide continued leadership in this changing landscape.

Rising Expectations of Citizens and Business Partners

eCommerce and Internet technology are fundamentally altering the way people conduct their daily lives and revolutionizing citizen-to-business, citizen-to-government, business-to-business, business-to-government, and government-to-government interactions. As shown in Figure 3, what were considered tremendous “opportunities” have become imperatives. Government agencies must harness existing and emerging electronic technologies because the public now measures “service” against the highest private sector levels to which they have become accustomed.

Figure 3. Rising Citizen and Business Partner Expectations



The “eCitizen”

Less than 20 years ago, the typical consumer did all his or her banking in person at a branch office. Now consumers enjoy the convenient options of banking via direct deposit, automatic deductions, phone, ATMs, and the Internet. New online banking entities can offer customers higher savings rates because they have eliminated the cost of storefronts entirely.

The Internet has produced a new consumer, the “eCitizen.” The typical profile of an “eCitizen” is someone who is:

- Increasingly educated and smarter about what they want and how to get it;
- Empowered to get what they want to buy, not just what companies want them to buy (e.g., virtual comparison shopping with low information costs); and
- Determined to secure new, higher quality products and services more quickly and less expensively.

Virtual Business Partners

As organizations increasingly use electronic technologies to transact and interact faster and more cheaply, they expect and demand to conduct business with HUD and other Government agencies in the same manner.

Internally, organizations share more and more information and resources in a virtual environment. Likewise, they interact electronically with other institutions and with their customers. Many of HUD's business partners are even more advanced in adopting the Internet than citizens.

Reforming Government

To remain relevant and competitive, Government organizations need to anticipate how the needs of the public and their business partners will grow — and be prepared to meet them. All over the world, governments are advocating eGovernment in response to the rising expectations of their citizens and business partners, changing industry environments, and a changing economy.

The promise of eCommerce in the public sector is premised on the notion that successful governments will be enabled to deliver more with less. Strong executive leadership, high-profile congressional mandates, and prominent oversight are proactively shaping how traditional Government progresses toward eGovernment.

Specifically, two Executive Branch directives have been catalysts to transforming Government agencies: (1) the 1999 Presidential Directive on Electronic Government, which directs agencies to ensure that their essential interactions with citizens are available via the Internet; and (2) the subsequent e-Society Directive, which instructs Federal agencies to use information technology to help enrich the education and lives of all citizens. Likewise, initiatives such as Firstgov.gov and legislation like GPEA and the Electronic Signature Bill (eSIGN) have been instrumental in reforming Government to capitalize on emerging technological trends. A detailed list of legislation, directives, and oversight guidance regarding technology and Government can be found in Appendix C.

Vision for eHUD

eHUD Mission

To promote healthy homes and viable communities by leveraging electronic commerce to empower citizens, business partners, and employees to transact business and gain the knowledge they need in the eEconomy.

eGovernment at HUD must enable the Department to fulfill its mission. Given HUD's unique role in American society, we must both enable eCommerce and promote eGovernment. The Department can accomplish the former by stimulating the participation of community-based organizations, Public Housing Authorities, under-served communities and disadvantaged citizens in the expanding digital economy. Lack of access to technology and technical skills in an era dominated by electronic change threatens economic opportunity and social inclusion. HUD must help bridge the "digital divide" or else risk failing to achieve its mission and the associated goals of economic development and self-sufficiency. To be an eGovernment innovator, we must build on our successes, incorporate best practices, and create new, integrated solutions for HUD's citizens, business partners, and employees.

eHUD Vision

To be a knowledge-driven leader in eGovernment and provide the highest levels of citizen service by fundamentally transforming our business, creating innovative partnerships, and focusing on value-added, integrated solutions.

Essential elements of the vision statement are described below:

- 1. Create and manage knowledge.** Data for data's sake is useless. Users need information that is accurate, timely and synthesized to enable them to make decisions and take action. HUD must facilitate collaborative work and knowledge sharing.

- 2. Provide continued leadership.** The “eHUD” vision expresses our aspiration to be a leader, a model for other Government agencies. Leadership means building and incorporating best practices and applying innovative thinking in both the public and private sectors.
- 3. Provide value-added, integrated solutions focused on citizens.** HUD’s vision is premised on increasing direct interaction between HUD and its beneficiaries. We strive to develop a knowledge base about the needs of individual citizens and communities, and to create integrated, electronically-accessible, one-stop solutions to meet those needs directly, without intermediaries.
- 4. Fundamentally transform HUD’s business models and integrate processes across the Department.** To be a leader, we must virtually or actually integrate program areas and organization structures to deliver unified, coordinated operations, and value-added products and services. Our efforts will motivate and reward employees to work and act from an enterprise-wide perspective to realize our shared vision for the future.
- 5. Partner, collaborate, and connect externally.** eHUD will work creatively with other Government agencies, grantees, Housing Authorities, industry partners, and the private sector to provide integrated, comprehensive solutions for communities and individuals; and to capitalize on widely available and accessible technologies that allow people and organizations to be “connected” regardless of their physical location or organizational barriers.



eHUD Strategic Goals

Each of the strategic goals for eHUD is aligned with HUD’s overall strategic goals, mission, vision, and core values. (See Figure 4, *Aligning eHUD Strategic Goals to HUD Strategic Goals*.) The use of electronic technologies is simply a means to an end, not the end itself, and our strategic goals do not imply that all of our transactions with citizens and business partners will be conducted online. However, they do indicate that the Internet is a prominent channel for service and product delivery that HUD must embrace. The human element in HUD’s services will neither be diminished nor displaced by the Internet. First and foremost, HUD is a business about and for people. Web-based technology will be used to support, supplement, and enhance the personal interactions between citizens, business partners, and HUD employees.

Each of the goals is critical if HUD is to ensure inclusion for all citizens and to operate effectively and efficiently in a new environment. These goals are also mutually reinforcing.

Strategic Goal 1: Citizens

Improve housing opportunities, self-sufficiency, and quality of life for citizens and HUD beneficiaries by leveraging electronic commerce to meet their needs directly.

Traditionally, the vast majority of HUD's programs and resources are delivered to the public via its extensive network of business partners (e.g., lenders, nonprofit grantees, homeless assistance providers, and Public Housing Authorities). Consequently, most of HUD's eGovernment efforts have focused on interacting with our business partners. eHUD's first strategic goal is to provide value-added goods and services directly to beneficiaries and citizens; and to empower citizens to get what they need, when they need it.



Strategic Goal 2: Business Partners

Ensure HUD's business partners have the needed tools to deliver HUD products and services effectively and efficiently in a virtual environment.

HUD leverages a vast network of local, state, and national partners to achieve and fulfill its mission. eHUD's second strategic goal is to partner with the housing industry and other Government agencies to create and deliver Internet tools and capabilities that improve communication and transactions among HUD's citizens, business partners, and employees.



Strategic Goal 3: Employees and the Enterprise

Restore the public trust by utilizing technology to operate a productive and responsive enterprise.

HUD's employees are its most valuable resource. eHUD's third strategic goal is to create a dynamic work environment that fosters continual learning, facilitates teamwork, and provides employees with real-time, accurate information for decision-making. Satisfying this goal also fundamentally addresses the issue of assuring the public trust.



GPEA Compliance

The Government Paper Elimination Act of 1998 dictates by 2003 that all Federal agencies must provide options for the public to interact electronically with the agency, develop a means to maintain records electronically, and provide electronic signature alternatives, when appropriate, to minimize the necessity of physical signatures. GPEA endeavors to ensure Government agencies are responsive to the public's changing demands and fully embrace new technologies to minimize the need for unnecessary travel to Government offices, cumbersome forms, and lengthy waits to receive Government products and services.

GPEA's specific provisions must be adhered to within a given time frame. Congress legislated that each Federal agency submit to the Office of Management and Budget (OMB) a GPEA Implementation Plan in October 2000. This Plan and schedule must outline all of the agencies' paper-based transactions with the public and between other Government agencies. A copy of HUD's submission can be found at <http://www.hud.gov/cio/egov/gpeaplan.html>.

HUD's eGovernment Strategic Plan fully captures the intent of the Act and offers a comprehensive vision of how electronic technologies can transform the Department. GPEA sets the framework upon which eHUD must be built; serves as an official driver to ensure that eGovernment continues to evolve; provides specific technology options that must be explored; and establishes guidelines to develop electronic transactions and interactions.

GPEA's primary focus revolves around having agencies transform paper-based processes that largely involve forms and applications into automated processes that can be conducted more efficiently via eCommerce technologies. Many of these paper-based means of collect-

ing information will need to undergo a business process improvement effort to minimize the steps and time required to complete a certain process. Automating these streamlined processes will be a part of the more comprehensive solutions presented in the Implementation Path section of this Plan.

As HUD develops procedures for citizens and business partners to do business with the Department via eGovernment technologies, the provisions set out by GPEA will help achieve all three of the eHUD strategic goals. Satisfying GPEA requirements will be integrated into information technology budgeting and strategic planning processes throughout HUD. Both the short- and long-term initiatives of each eHUD goal provide comprehensive solutions that inherently fulfill the mandates of GPEA. If these goals are achieved, citizens will have a wide range of electronic options to find and obtain housing and conduct end-to-end transactions with HUD.

Likewise, business partners will be able to conduct their day-to-day transactions with HUD, including submitting compliance documentation, applying for grants, and requesting information via the Internet. Employees and the enterprise will directly benefit by effectively leveraging electronic records and data maintenance. Furthermore, online information exchange will result in the automation of tedious and mundane paper-processing, thus freeing employees to provide more value-added services.

Each of the electronic signature technologies highlighted in OMB's GPEA implementation guidelines will be explored as HUD develops short- and long-term eGovernment initiatives. Policies concerning risk mitigation and security measures for Internet and other high-risk transactions will also be further developed in future HUD-wide policies and procedures. Please see the Implementation Path section of this Plan for more information.

Fundamentally, GPEA serves as a key building block for developing HUD's eGovernment vision. HUD's eGovernment Strategic Plan embodies the intent of GPEA by setting a specific agenda to better serve the public and operate more efficiently.

Implementation of this Plan will be closely integrated with HUD's GPEA compliance submission to OMB.

Figure 4. Aligning eHUD Strategic Goals to HUD Strategic Goals

HUD Strategic Goals	eHUD Strategic Goals		
	1. Improve housing opportunities, self-sufficiency and quality of life for citizens and HUD beneficiaries by leveraging electronic commerce to meet their needs directly.	2. Ensure HUD's business partners have the needed tools to deliver HUD products and services effectively and efficiently in a virtual environment.	3. Restore the public trust by utilizing technology to operate a productive and responsive enterprise.
1. Increase the availability of decent, safe, and affordable housing in American communities.	✓	✓	
2. Ensure equal opportunity in housing for all Americans.	✓	✓	
3. Promote housing stability, self-sufficiency, and asset development of families and individuals.	✓		
4. Improve community quality of life and economic vitality.	✓	✓	
5. Ensure public trust in HUD.	✓	✓	✓
GPEA Compliance	✓	✓	✓

Transforming the Way HUD Does Business

Overview

Transforming the way HUD does business requires integrating and expanding current eGovernment capabilities into a comprehensive roadmap for the future. For each eGovernment strategic goal, this Plan identifies specific objectives, targeted outcomes, associated project initiatives, and high-level performance measures. Because the goals and objectives presented are mutually reinforcing, a future effort may satisfy more than one goal or objective.



- Strategic outcomes paint a picture of what HUD will look like with eGovernment fully implemented.
- Project initiatives provide an overview of current capabilities, short-term initiatives, and long-term opportunities.
 - Current capabilities are eGovernment efforts already implemented at HUD.
 - Short-term initiatives will be targeted for implementation between FY 2001-2003, and long-term opportunities will be targeted for implementation between FY 2004-2005.
 - The short-term initiatives represent a range of funding levels; some are already funded and in development, while others will be candidates for funding in the next few years.
 - Both short- and long-term opportunities will need to be pursued as part of HUD's IT Capital Planning process and be integrated with the Enterprise Architecture.
- Performance measures broadly define how to gauge our success in achieving each objective, rather than providing detailed metrics for each initiative. As project initiatives are funded and developed, specific performance measures will be integrated into HUD's Business and Operating Plan.

HUD is a recognized leader in eGovernment with core strengths in transacting with business partners. Currently, HUD has more than 75 projects under the umbrella of eGovernment. The majority of these projects improve transactions between HUD and its business partners. A complete baseline of HUD's current eGovernment efforts can be found in Appendix E.

In a fully transformed HUD:

- New payment systems will provide faster and more efficient means to settle accounts with suppliers and contractors and disburse Federal funds to grantees.
- New interactive database capabilities and hand-held technologies will provide opportunities to better enforce housing laws, monitor compliance, and reduce fraud, waste, and abuse.
- New portal technologies will enable better integration with lenders, brokers, and other business partners, as well as provide one-stop solutions for citizens.

Each initiative outlined in “Transforming the Way HUD Does Business” stems from the strategic thinking of HUD executives, managers, and staff. However, fully realizing each initiative will depend upon the availability of sufficient funding, continued management support, and further refinement of the initiatives and the Plan itself so that it remains relevant to ever-changing technologies and the economy.

eHUD Strategic Goal 1: Citizens

Improve housing opportunities, self-sufficiency, and quality of life for citizens and HUD beneficiaries by leveraging electronic commerce to meet their needs directly.

Figure 5. Citizen-related Strategic Initiatives

Current Capabilities	Short-term Initiatives	Long-term Opportunities
<ul style="list-style-type: none">• www.HUD.gov• Neighborhood Networks• HUD Kiosks/HUD Answer Machines	<ul style="list-style-type: none">• First-Time Homebuyers Portal• Internet Access in Neighborhood Networks• Sharing Technology• Anti-Discrimination Campaign	<ul style="list-style-type: none">• Rent.HUD.gov• eVoucher System• Buying/Selling Homes Directly to Citizens• Temporary Shelter Search• Financial Management and Job Placement Tools

Objective 1.1

Increase homeownership, the availability of affordable rental housing, and equal opportunity by utilizing web-based technology to assist citizens in need.

Strategic Outcomes 1.1

The successful accomplishment of Objective 1.1 would create outcomes such as:

- Citizens and HUD beneficiaries would have instant access to information about the availability, prices, and amenities of homes for sale and rental housing;
- Citizens would have online tools to manage their financial situations both in preparation for homeownership and to assist in maintaining their homes;
- Citizens would virtually share knowledge, experiences, and contact information with each other, HUD, and HUD business partners concerning the homeownership process, rental procedures, home improvements, financing options, difficulties with landlords/Public Housing Authorities (PHAs), credit issues, and tailored electronic counseling; and
- Citizens would complete the end-to-end process of purchasing a home or finding rental housing by utilizing self-directed services, online tracking systems, virtual loan interviews, electronic payment transfers, and electronic signature technology.



Project Initiatives 1.1

HUD's Homes and Communities Web site (www.hud.gov) is an award-winning, audience-focused site, launched in 1995, that reflects feedback from hundreds of site visitors. The Web site was conceived as a clearinghouse or portal of information and services related to homes and communities, for citizens and current and future business partners.

The site contains information from all of HUD's program, support, and local offices, as well as links to thousands of other Web sites containing valuable information and services about homes and communities. HUD's Homes and Communities page is visited by some 600,000 unique visitors each month (i.e., 75 million "hits"). A conservative estimate is that 75% of the visitors are private citizens, most of them desiring information on how to buy a home.

HUD.gov has a number of innovative features including webcasting, online live and taped broadcasts of training sessions, public service announcements, and press conferences and other important events. Using HUD's Web site, citizens can file a housing discrimination complaint, search for HUD-approved lenders, scan listings of HUD homes for sale, participate in online discussions, and create maps showing Government activity in their neighborhoods.

Over the next 3-5 years, HUD must be focused on transforming this information into knowledge a customer can use on a daily basis to achieve Objective 1.1. We should develop initiatives that allow a person to proactively buy a home or find rental housing without sifting through HUD's vast organizational network. New initiatives, such as those outlined below, should capitalize on existing information found on HUD.gov, incorporate new customer-centric content, and increase functionality so the site meets its goal of directly connecting HUD to citizens and beneficiaries.

Five additional prospective eGovernment initiatives are outlined below:

- **First-time Homebuyers Portal (Short-term)**

The First-time Homebuyers Portal would serve as a "one-stop shop" for low- and moderate-income families, individuals, and other HUD stakeholder groups to purchase and maintain homes of their own. The portal would pull together information from both local and national content providers. Users would log-in to search for homes, access financial tools and advice, receive information and news, and search for local assistance.



This portal would expand HUD's current Homebuyer's Kit and programs such as the "One Million Homes" initiative to make tools interactive and transactional. Citizens would continue to have assistance and services geared toward maintaining their homes once they are purchased.

- **Anti-Discrimination Campaign (Short-term)**

The Anti-Discrimination Campaign would be a proactive online marketing and education campaign to increase the public's awareness of their rights and decrease discriminatory practices in the housing industry. HUD would partner with the Department of Justice to educate citizens about their housing rights; expand its partnership with the Department of Treasury to prevent/eliminate predatory lending practices; and develop new partnerships with other agencies and nonprofit communities to centralize and coordinate anti-discrimination efforts. Beyond information and awareness, the campaign also may include bringing new analytic and training tools to bear on discriminatory issues.

- **Rent.HUD.gov (Long-term)**

The idea of Rent.HUD.gov is modeled after such private sector companies as apartmentsearch.com and rent.net. This portal would serve citizens in need of rental assistance and function as an online national inventory of HUD's public housing and voucher-recipient units.

Individuals and families in need of subsidized housing would be able to search for rental units and receive detailed information about properties (e.g., availability, pricing, and amenities). Every user would build a personal profile that would be saved and used repeatedly, thereby reducing redundant data entry.

- **eVouchers (Long-term)**

The eVouchers system can be thought of as an extension of the Rent.HUD.gov initiative. In addition to searching for rental housing, low- and moderate-income families would apply for Section 8 vouchers/certificates directly online or via phone. The system would determine eligibility and the subsidy amount using income verification and other criteria. Applicants would be approved online and receive vouchers disbursed directly to a specialized account made possible through partnerships with private banks or other financial institutions.

- **Buying/Selling Homes Directly to Citizens (Long-term)**

Buying and selling homes to citizens would be a part of a long-term effort to allow prospective homebuyers to post their interest in a home and allow sellers and brokers to contact buyers to encourage competition in the selling of their homes. This idea of competitive selling borrows from the private sector's idea of "reverse auctions," i.e., the Priceline.com model where customers name their own price for a desired plane ticket (and other products) and airlines can accept or deny the bid, and the similar LendingTree.com model in the loan market.

This initiative would go a step further by allowing users to create a profile of their desired homes and then make that profile available online to be matched to homes for sale by owners or brokers.

Citizens then would have the option to purchase a house directly, rather than going through a broker to buy HUD-owned properties.

Performance Measures 1.1

Indicators for the successful accomplishment of Objective 1.1 would focus on increasing the number of people who buy and sell houses using web-based technology — especially the percentage increase from the baseline analysis of buyers/sellers without the technology in place.

In developing performance measures for specific projects, planners will consider:

- Increases in the number of homes or rental units obtained using eGovernment systems;
- Decreases in the time it takes an applicant to find and secure a home or rental unit;
- Increases in the awareness of citizens regarding housing rights; and
- Increases in the percentage of HUD homes sold online.

Objective 1.2

Help bridge the digital divide by increasing access, knowledge, skills, and usage of technology by low-income citizens and HUD beneficiaries.

Strategic Outcomes 1.2

The successful accomplishment of Objective 1.2 would create outcomes such as:

- Section 8 and Public Housing assisted individuals and families would have convenient personal and/or public access to the Internet;
- Low-income citizens would be trained and skilled in effectively using computers and the Internet; and
- Low-income families and individuals would regularly utilize the Internet and eCommerce to improve their lives.



Project Initiatives 1.2

HUD has made significant strides toward achieving Objective 1.2. For example, HUD consolidated all of its disparate initiatives for computer technology centers under the umbrella of “Neighborhood Networks.” This program, launched more than four years ago, currently allots funds for Public Housing Authorities or community-based organizations to develop technology centers for Public Housing residents. With over 1,100 centers, this effort serves as HUD’s model for bridging the digital divide and is a catalyst for all future initiatives.

Additionally, HUD has placed over 87 kiosks around the country in heavy-traffic public spaces (e.g., malls, grocery stores, and public libraries). These kiosks are public computers that provide citizens with HUD-specific information. Over the next few years, HUD will consider strategic partnerships with private and public organizations to continue bringing technology to our customers. The following two short-term initiatives have been identified for the Department:

- **Internet Access in Neighborhood Networks (Short-term)**

Internet Access in Neighborhood Networks is an initiative to provide specific funds, current and future, to Neighborhood Networks centers to ensure that the majority of their users can access and readily use the Internet on the centers' computers. While many of the Neighborhood Networks centers have some level of Internet access, this initiative will help all the centers develop their technology infrastructure and capabilities to support increased usage of the Internet.

- **Sharing Technology (Short-term)**

Sharing Technology initiatives would focus on delivering a wide variety of technology, e.g., hardware and software, to HUD beneficiaries directly and through community-based organizations. Additional grant money would be allotted to community organizations for computer equipment and to develop or purchase computer-training software and classes for citizens. A national and local pool of used equipment, including HUD's, would be organized for donation to Public Housing residents, voucher-assisted families and Indian tribes, and other HUD beneficiaries.

Performance Measures 1.2

Indicators for the successful accomplishment of Objective 1.2 would focus on increasing the number of low- and moderate-income people who understand and use the Internet and have access to technology. In developing performance measures for specific projects, planners will consider the:

- Percent of public-assisted families and individuals that use the Internet;
- Frequency of Internet use by low-income families; and
- Number of persons trained by HUD, directly or indirectly, to use the Internet.



Objective 1.3

Utilize the Internet to foster asset development and self-sufficiency through education, job training, and job placement opportunities for Section 8 and Public Housing residents.



Strategic Outcomes 1.3

The successful accomplishment of Objective 1.3 would create outcomes such as:

- Public-assisted and HUD-insured individuals would use online interactive and scenario-based financial planning tools to achieve their financial goals (e.g., to facilitate debt management, credit assistance, budgeting and savings); and
- HUD customers would increase their workforce readiness through virtual classes for literacy, degree programs, skill development and certification, and career management.

Project Initiatives 1.3

Currently, HUD has several programs geared toward asset development, such as the Resident Opportunity and Self-Sufficiency (ROSS) Program, HOPE VI, and the Family Self-Sufficiency Program. ROSS provides Public Housing residents with education, skills training, and micro-enterprise development support. HOPE VI is a private sector initiative to connect national employers with Public Housing Authorities and to allow employers to provide training and jobs to Public Housing residents. The Family Self-Sufficiency program provides asset-building tools in the form of escrow accounts.

Although most of the aforementioned asset development programs do not have explicit Internet or computer technology objectives, Neighborhood Networks centers have been used to successfully deliver computer-training classes. In fact, more than 100 residents have found employment after completing computer training programs offered by Neighborhood Networks centers.

Long-term initiatives focus on further developing training opportunities and on tailoring financial planning tools to help HUD's customers set financial goals, effectively use Government subsidies, take advantage of electronic bill payment, and establish automatic deposits into escrow accounts. Several state government portals, such as OhioWorks, demonstrate how online job-matching services can help private

companies hire Welfare-to-Work participants. The following long-term opportunity should be explored to help achieve this objective:

- **Financial Management and Job Placement Tools (Long-term)**

Online financial planning services and products, similar to those introduced in the First-time Homebuyers Portal and Rent.HUD.gov, would be geared toward Public Housing residents. Specifically, online financial advice, counseling, and debt management kits would be developed and integrated into current job assistance programs. HOPE VI, ROSS, and the Family Self-Sufficiency Program would be expanded to include web-based programs and functions.

Performance Measures 1.3

Indicators for the successful accomplishment of Objective 1.3 would primarily focus on improving the financial situation and job readiness of Public Housing individuals and families. In developing performance measures for specific projects, planners will consider the number of:

- Employers participating online;
- Beneficiaries utilizing financial management accounts/tools;
- Beneficiaries taking online job training;
- Financial management and job training tools online; and
- Beneficiaries who found jobs using job placement tools.

Objective 1.4

Satisfy emergency and temporary housing needs with real-time information and technology.

Strategic Outcomes 1.4

The successful accomplishment of Objective 1.4 would create outcomes such as:

- Homeless families, battered women, and runaways would instantly find the nearest available shelter or temporary housing by accessing

the Internet in libraries, kiosks, and other locations, working with professionals who can access the information system, or dialing a 1-800 telephone number.

- Individuals in shelters would use the Internet to explore options to move from homelessness to a home or find short- and long-term assistance and counseling; and
- Profiles of shelters would be tracked over time to monitor usage and other trends.



Project Initiatives 1.4

Currently, HUD's comprehensive "Continuum of Care" model encourages local providers to develop a full range of services to assist the homeless population within their communities in moving from transitional to permanent housing. The Department provides grants to communities to develop and maintain emergency shelter networks, which serve as entry points for individuals and families into the Continuum of Care system.

Initial efforts to assist those in need of emergency housing should focus on closing the technical gap of homeless assistance providers, utilizing easily accessible communication methods, and working through professionals who frequently help this population. The following long-term opportunity would satisfy this objective:

- **Temporary Shelter Search (Long-term)**

The Temporary Shelter Search referral system would provide the homeless, battered women, and runaways real-time access to information and search capabilities concerning the availability of space in local shelters and temporary housing facilities. The system initially would be geared toward professionals such as local police, firemen, etc., and would be accessible to the public through a Web site and a 1-800 number. This site would be designed to assist those in need of emergency assistance in determining the nearest shelter location and its current availability and services, including daytime activities, medical care, job training, child care, and meals.

Performance Measures 1.4

Indicators for the successful accomplishment of Objective 1.4 would focus primarily on providing timely information to individuals in need of emergency shelter or temporary housing. In developing performance measures for specific projects, planners will consider the:

- Number of people finding assistance using the Internet and phone system; and
- Percentage of shelters and other emergency assistance providers with a searchable online presence.

eHUD Strategic Goal 2: Business Partners

Ensure HUD's business partners have the needed tools to deliver HUD products and services effectively and efficiently in a virtual environment.

Figure 6. Business Partner-related Strategic Initiatives

Current Capabilities	Short-term Initiatives	Long-term Opportunities
<ul style="list-style-type: none"> • HUD Web Clinics • Electronic Bidding for HUD Homes • FHA Connection • GinnieNET 2020 • Mark-to-Market MIS System • Community 2020 • Public and Indian Housing Information Center • Native eDGE 	<ul style="list-style-type: none"> • Empowerment Information System (EIS) • Paperless FHA Insurance • Federal One-Stop Shopping Initiatives • Departmental Grants Management System (DGMS) • Community Development Portal • Multifamily Integration 	<ul style="list-style-type: none"> • Online Research Collaboration • Connecting with HUD • Online Work Applications

Objective 2.1

Provide real-time, accurate information exchange, interactive communication, and seamless integration between HUD and its business partners.

Strategic Outcomes 2.1

The successful accomplishment of Objective 2.1 would create outcomes such as:

- Business partners would have online access to a standardized database of HUD's national and local networks, including nonprofits, PHAs, faith-based organizations, contractors, and other business constituents;
- HUD's business partners would use intelligent search engines that customize the HUD information and resources necessary for doing their jobs;
- HUD business partners would use instant-messaging technology, automated processing, and proactive project-management tools that allow them to monitor their funds, receive instant answers to questions, and access current information; and
- HUD business partners would provide improved customer service to HUD beneficiaries.

Project Initiatives 2.1

Over the past 4 years, HUD has developed several eGovernment initiatives that demonstrate its commitment to achieving this goal. For example, the following model programs are already transforming how we interact with our business partners: FHA Connection, PIH Information Center (PIC), Mark-to-Market (M2M) Management Information System (MIS), and GinnieNET 2020.

- FHA Connection increases and standardizes communication with the mortgage lender industry and conducts over 200,000 transactions per day. The application allows FHA-approved lenders to initiate loan origination and perform some loan-servicing functions online.
- PIC is a one-stop information source for public-assisted housing. Using this system, over 3,400 Public Housing Authorities can submit data electronically for funds allocation and view a standardized national calculation that ranks risk assessment of their PHA plans.
- The M2M MIS system allows HUD to track properties and expiring Section 8 contracts. This system also permits Participating Administrative Entities to submit restructuring plans and report progress online.

- GinniNET 2020 enables issuers and document custodians to process mortgage-backed securities pools and deliver investor reports electronically. Through GinniNET 2020, Ginnie Mae demonstrated eGovernment foresight by capitalizing on both digitized signatures and encryption technology to eliminate paper signatures.
- Real estate brokers can submit bids electronically for HUD homes.

As HUD moves toward eHUD, the significant advances described above must be further developed to simplify transactions, improve communication, and reduce costs and delivery time. The following initiatives are short-term efforts that specifically build on current capabilities:

- **Empowerment Information System (EIS) (Short-term)**

HUD's Empowerment Information System (EIS) is an enterprise-wide information portal that provides HUD staff, Congress, business partners, local communities, and citizens with access to HUD data across multiple program areas. The EIS system provides a unified picture of HUD's assets, investments, activities, and initiatives by integrating data from numerous HUD program areas and delivering this data to users in a meaningful manner. Users of the EIS system would be able to access timely and reliable reports, maps, and analytical information based on their specific information needs.

- **Paperless FHA Insurance (Short-term)**

Paperless FHA Insurance is an extension of HUD's current efforts to provide automated insurance. This initiative would allow lenders to participate in a fully paperless process for FHA Insurance loans from the primary to the secondary market.

- **Departmental Grants Management System (Short-term)**

The Departmental Grants Management System (DGMS) provides an enterprise-wide solution to initiate, evaluate, award, manage, and monitor grant disbursements. This web-based system would provide a centralized database of detailed information and instructions for all HUD grantees; provide assessment functions that evaluate how effectively grant money is being managed; and calculate appropriations for formula grants automatically.

Employing the financial and physical assessment aspects of the Real Estate Assessment Center (REAC) model, DGMS would be leveraged in the future to link with a central Government Web site and then expanded to provide management and assessment functions for grantees of other Federal, state, and local agencies that would provide a revenue-generating opportunity for HUD.

- **Multifamily Integration (Short-term)**

The Multifamily Integration initiative would expand M2M MIS. In the short-term, multifamily housing lenders would be able to submit loan delinquency notification and process the Affiliated Business Disclosure and Previous Participation Requirements online. In the long-term, HUD would move to full electronic submission and disbursements with the multifamily industry.

Performance Measures 2.1

Indicators for the successful accomplishment of Objective 2.1 would focus primarily on increasing the effectiveness and quality of transactions that are completed between HUD and its business partners. In developing performance measures for specific projects, planners will consider:

- Increases in business partner satisfaction with HUD services;
- Decreases in transaction time between HUD and its business partners;
- Increases in the number of products and services that can be delivered online; and
- Increases in the usage of HUD's Internet tools by business partners.



Objective 2.2

Increase awareness of eCommerce and the availability of useful technology for grantees, Public Housing Authorities, and other community and faith-based organizations.

Strategic Outcomes 2.2

The successful accomplishment of Objective 2.2 would create outcomes such as:

- Public-private partnerships would provide high-quality software or hardware to enable business partners to perform eProcurement, electronic bill payment, and electronic monetary transfers; and
- Business partners would receive online consulting services; conduct and attend virtual community workshops; and collaborate with technology providers to learn, understand, and build eCommerce capabilities.

Project Initiatives 2.2

Currently, HUD demonstrates our commitment to assisting our business partners in their use of technology by offering Internet symposiums called “Web Clinics” and free software to help them develop effective, citizen-oriented Web sites with limited resources. These Web Clinics have been highly successful and well received, and more than 20 Web Clinics have been held nationally with over 360 organizations. In the short-term, HUD should expand these clinics. In the long-term, we should develop partnerships with the private and non-profit sector to increase the scope of services. The following initiatives are long-term efforts that specifically build on current capabilities:



- **Connecting with HUD (Long-term)**

Connecting with HUD would involve working with business partners to connect their Web sites and information with HUD's Web site and online applications. Training would provide guidelines and assistance to business partners so that their Web sites and back-end systems are properly integrated with HUD's key systems (e.g., PIC or FHA Connection). Collaborating in this way may also provide suggestions and tools to help increase features and functionality of different business partners' Web sites to promote consistency for the customer.

For example, the Rent.HUD.gov initiative involves developing search and information retrieval capabilities across all of the Public Housing Authorities and voucher-recipient business partners. Therefore, all PHAs and voucher recipients must have the same type of information available and provide the same or similar functionality. Working in concert with the private sector and trade association groups like the Public Housing Authorities Directors Association (PHADA) and the National Association for Housing and Redevelopment Officials (NAHRO), HUD would facilitate the development of standardized applications, such as financial management, accounting, and procurement functions.

- **Online Work Applications (Long-term)**

Online Work Applications would allow HUD to facilitate partnerships with industry groups to develop basic computer applications to assist HUD partners in providing services to the public. HUD would leverage its industry relationships to help HUD partners receive the software, hardware, and training needed to implement the applications.

For example, PHAs and Tribally Designated Housing Entities (TDHEs) need systems to enable them to accept tenant applications online, process them, inform applicants of their status, and monitor resolution. Standardized computer applications would allow them to better accept, track, and manage maintenance requests from their tenants, and communicate the status of those requests. Software applications could also be used to enable PHAs to conduct online chats and provide real-time information sharing with current and prospective tenants.

Performance Measures 2.2

Indicators for the successful accomplishment of Objective 2.2 would focus on the adoption and wide-spread use of the Internet and technology by HUD's business partners. In developing performance measures for specific projects, planners will consider increases in the:

- Number of business partners with technology in their organization;
- Usage, adoption, and integration of technology to conduct business and handle daily transactions;
- Understanding and awareness of the Internet and technology;
- Number of Web Clinics held; and
- Number of organizations attending Web Clinics.

Objective 2.3

Enhance and facilitate transactions between and among HUD's business partners and customers.

Strategic Outcomes 2.3

The successful accomplishment of Objective 2.3 would create outcomes such as:

- HUD's business partners would pool their resources to leverage better purchasing arrangements, share vendors, and manage contracts electronically; and
- HUD's business partners would use an online workplace site to share documents, manage projects, and collaborate on HUD initiatives.

Project Initiatives 2.3

Currently, HUD has developed a communications system that makes community planning and housing project information readily available. After consolidating four major programs into one, HUD created a software package called Community 2020 to provide demographics and regional information on schools, local agencies, businesses, and non-profit organizations.

Recently, HUD introduced another function of the Community 2020 software, HUD E-MAPS. HUD E-MAPS joins Community 2020 software with the Environmental Protection Agency's (EPA's) databases to provide decision-makers and citizens with detailed, site-specific information about what the Government is doing to protect the environment. HUD would expand the scope of this effort to allow regional information to be shared nationally by all HUD constituents.

The next phase of Community 2020 would connect and encourage interaction among HUD's network of providers and make transactions possible via the Internet. In the short-term, HUD should continue developing new capabilities for Community 2020 and position the resource under the umbrella of a one-stop source for community and housing development professionals.

- **Community Development Portal (Short-term)**

The Community Development Portal would be a one-stop Internet resource for all professionals involved in community development. This portal would include national and local information, tools, and access to community development resources. The site would contain training resources, analytical toolkits, best practices information, specialist advice, national and local organizational directories, funding resources, and news briefs. In the long-term, the site would function as a business-to-business exchange and matchmaking resource to help inner-city and rural communities foster economic growth.

- **Online Research Collaboration (Long-term)**

An online research collaboration site would allow business partners, academics, and other researchers to share data and statistics. This site would focus on enabling active leadership in community development and housing. This initiative would provide easy-to-find, real-time information about current insights, emerging trends, and detailed analyses on significant topics directly or indirectly involving the work of HUD and its business partners.

Performance Measures 2.3

Indicators for the successful accomplishment of Objective 2.3 would focus primarily on improved collaboration and interaction between HUD's network of business partners. In developing performance measures for specific projects, planners will consider increases in the number of:

- online transactions among business partners; and
- business partners online.

Objective 2.4

Lead intergovernmental efforts, where appropriate, to better serve citizens and business partners.

Strategic Outcomes 2.4

The successful accomplishment of Objective 2.4 would create outcomes such as:

- HUD, the Department of Health and Human Services, and other Federal agencies would collaborate to provide electronic case management for public-assisted citizens. For example, agencies could share files about Welfare-to-Work, job placement/training, food stamps, Aid to Families with Dependent Children (AFDC), Medicaid, and Vouchers; and
- Federal, state, and local governments would work together to provide an online, comprehensive self-development plan for individuals and families to move from public assistance to self-sufficiency.



Project Initiatives 2.4

Currently, HUD works with numerous agencies to augment asset development, provide a safety net for the poor, and increase homeownership opportunities. Native eDGE is an interagency collaborative effort that allows lending institutions, non-profits, foundations, and private institutions to provide Internet-based services for Native American entrepreneurs. Many of HUD's interagency efforts (e.g., the President's Council on Fair Housing and the Interagency Council on Homelessness) should

also capitalize on eGovernment. Internet information systems can enhance real-time information and accuracy of data for interagency reporting agreements (e.g., HUD's alliance with the Department of Justice and the National Crime Information System to reduce fraud and improve enforcement of Federal laws).

In the short-term, HUD should improve communication between agencies involved in existing intergovernmental collaborations by using the Internet, and working closely with the Federal CIO Council and other agencies to further develop firstgov.gov. This Federal Web site provides citizens and business partners with one standardized site for all Government services. FirstGov allows users to browse a wealth of information — everything from researching at the Library of Congress to tracking a NASA mission. As FirstGov is further developed, it will enable users to conduct important business online — such as applying for student loans, tracking Social Security benefits, comparing Medicare options, and even administering Government grants and contracts. This one-stop shopping for Government services is designed to help Americans across the country and around the world find the information and resources they need at the click of a mouse, both quickly and easily. This type of initiative represents a vision for collaboration and the evolution of eGovernment. The following short-term initiative specifically builds on current capabilities:

- **Federal One-Stop Shopping Initiatives (Short-term)**

As the Federal government develops more initiatives that span across agencies, such as FirstGov, HUD would actively participate in efforts that improve the delivery of Government services. In particular, HUD would actively engage in a Federal eProcurement solution and a Government-wide grants management program.

Performance Measures 2.4

Indicators for the successful accomplishment of Objective 2.4 would focus on HUD's role in integrating services and products across Government and among agencies that share customer groups. In developing performance measures for specific projects, planners will consider increases in the number of:

- Citizens and business partners whose needs are satisfied through a single interaction with the Federal Government;
- People who transition from any form of public assistance to self-sufficiency; and
- Collaborative partnerships between and among Government agencies.

eHUD Strategic Goal 3: Employees and the Enterprise

Restore the public trust by utilizing technology to operate a productive and responsive enterprise.

Figure 7. Employee-related Strategic Initiatives

Current Capabilities	Short-term Initiatives	Long-term Opportunities
<ul style="list-style-type: none"> • Employee Express • HUDweb • Information Technology Investment Portfolio System (I-TIPS) • Real Estate Assessment Center 	<ul style="list-style-type: none"> • Electronic Concurrence • Virtual University • Training Registration • eProcurement • Lender Assessment • Online Job Applications • Digital Cameras/Video • Travel Management System • Virtual Teams • Integrated Knowledge Management System • Lead-based Paint Inspections • HUD-owned Property Inspections • Davis-Bacon Act Wage Matching 	<ul style="list-style-type: none"> • Integrated Human Resources • Integrated Financial Management

Objective 3.1

Integrate front- and back-end business processes to allow seamless eGovernment activity and reduce paper-processing.

Strategic Outcomes 3.1

The successful accomplishment of Objective 3.1 would create the following outcomes:

- HUD would process applications, award grants, review requests, and track the progress of projects and documents electronically;
- Smart technology would be used to calculate scores for grants, review and check documents, automatically send messages to respondents and employees, and make purchases;

- Internet tools would proactively monitor project status, disburse funds, file documents, and generate reports. For example, an employee could automatically view the status of a grant, check when and how much money was disbursed to a business partner, and determine the exact progress of a loan application; and
- HUD would be able to significantly expand the scope and quality of its oversight of approximately 3,200 Public Housing Authorities and approximately 30,000 multifamily properties, as well as the nearly one million single family appraisals performed for new home buyers annually.

Project Initiatives 3.1

Currently, HUD's model organization for achieving this objective is REAC. REAC was established as an "eBusiness" and has implemented a technologically advanced set of systems that successfully demonstrate how technology can be used to integrate an organization's back- and front-end processes. REAC's "product" is information: credible, objective information assessing the condition of HUD's housing portfolio.

To deliver a quality product, REAC depends on the successful partnership of people and technology. Extensive use of the Internet for data transmission is bursting open electronic avenues of communication with HUD's housing partners, and improving the speed and accuracy of assessment results. Users of the information are HUD program staff, Public Housing Authority (PHA) administrators, multifamily property owners or agents, and others charged with the preservation and management of the Nation's housing stock. REAC serves as the model for HUD to automate and reengineer its business processes.



In the short term, effective automation will require that some HUD program and support offices reengineer processes involving core business functions. While many of these business transactions affect citizens and business partners, they best achieve the objectives of automating internal processes, reducing paper processing, and integrating front- and back-end processing. In the long run, HUD would fully integrate and automate core administration and human resource systems.

- **eProcurement for Contracts (Short-term)**

eProcurement for Contracts would allow contract creation, posting, evaluation, award, and oversight to be web-based and paperless. This initiative could be part of a Government-wide solution. The site would allow contractors, HUD employees, and even citizens to access valid and reliable information easily.

- **Online Job Applications (Short-term)**

Online Job Applications would allow a user to enter his or her job criteria, receive information on available jobs, and apply for the job online. The system would be directly linked with the Office of Personnel Management's hiring system, and an automated scoring/initial evaluation process would also be used to perform an initial assessment of the applicant. Additionally, users would be asked to enter certain credentials to enable Government employers to search for job applicants meeting their criteria for openings in the Department. The system would also contain career profiles and provide information about applying for Government jobs.

- **Integrated Human Resources (Long-term)**

An integrated human resource (HR) system would be a web-based application used by the entire Department. The system would link common human resource functions with financial planning systems to more effectively manage and determine skill needs, training gaps, and succession planning within the Department.

System users would be able to perform standard HR functions (e.g., time and attendance, benefits, vacation and sick leave) and use more sophisticated functionality such as queries to determine office attrition, tools to forecast staffing needs, a planning mechanism to identify replacements for retirees, and an employee tracking system.

- **Integrated Financial Management (Long-term)**

An integrated financial management system would connect accounting general ledger activities, disbursements, and budgets to the financial systems of our major business partners (i.e., Treasury). Such a system would have the ability to produce real-time reports for program office customers, automatically route and approve small credit card payments, allow electronic approval and routing of budget and travel documents, and perform electronic billing and payment functions from and for vendors. In addition, an integrated financial management system would necessitate the use of electronic signature and electronic routing technologies.

Performance Measures 3.1

Indicators for the successful accomplishment of Objective 3.1 would focus on the number and quality of HUD's business processes and core functions that are fully electronic. In developing performance measures for specific projects, planners will consider decreases in:

- Application and approval cycle time;
- Inquiry response time;
- Transaction costs; and
- The number of labor hours utilized to conduct transactions and business functions.

Objective 3.2

Improve the stewardship of HUD's resources by eliminating fraud, waste, abuse, and operational inefficiency.

Strategic Outcomes 3.2

The successful accomplishment of Objective 3.2 would create outcomes such as:

- HUD's electronic disbursement systems would have encoded security measures and checks to ensure authenticity and accuracy;
- HUD's enforcement organizations would gain real-time access to financial information;
- HUD's oversight of Public Housing Authorities, multifamily properties, and housing subsidy recipients would be expanded and dramatically improved; and
- Breaches in security or fraudulent activity would be identified and recorded automatically.

Project Initiatives 3.2

Currently, HUD has at least three organizations that specifically focus on ensuring the public trust: REAC, the Troubled Agency Recovery Centers (TARCs), and the Departmental Enforcement Center (DEC).

- REAC provides HUD with a new level of management capability by consolidating and expanding the scope and quality of HUD's oversight of Public Housing Authorities and multifamily properties. REAC provides timely, accurate, and objective assessments of the physical condition, financial soundness, management capability, and resident satisfaction for HUD's real estate portfolio, and facilitates income verification of Public Housing and multifamily recipients to ensure that housing subsidies are properly paid. Additionally, REAC assesses the quality of nearly one million single family appraisals performed for new homebuyers annually.
- If a PHA receives a failing assessment score from REAC, it is referred to the TARC. The TARC assists troubled PHAs by developing and implementing intervention strategies to help improve their performance. If an agency does not improve after one year in the TARC, it is referred to the DEC.
- The DEC addresses serious non-compliance with statutory and regulatory requirements for multifamily and single family housing and PHAs, and has taken strides to create electronic files through imaging technology to preserve the integrity of transferred information and document their investigations.

In the short-term, achieving this goal without completely redesigning the way information is gathered would be difficult because information from third-parties is not standardized. The Department's FY 2000-2006 Strategic Plan indicates that all employees with monitoring functions must be trained to conduct risk analyses, perform remote and on-site monitoring, and conduct quality assurance reviews. This training and support may be conducted electronically as a part of other training initiatives. The short-term initiatives outlined below focus on expanding the REAC business model to work with housing lenders, and leveraging new technology across the Department for all groups that have monitoring and compliance functions.

- **Lender Assessment (Short-term)**

The Lender Assessment System would expand the REAC model to electronically collect and assess the audited financial statements of FHA mortgage lenders. A web-based system would make it possible to assess financials, compliance- and performance-related information, and conduct real-time risk ranking and trend identification.

- **Digital Cameras and Video (Short-term)**

Digital camera technology would be used in conjunction with current hand-held Data Collection Devices in order to better inspect Public Housing Authorities and multifamily properties. Pictures would be quickly posted to the Internet, and the Enforcement Center and TARCs could use the photographs in working with troubled

agencies. The camera technology also would prove useful in conducting and documenting FHA appraisals. Similar video technology would enable FHEO to record interviews in discrimination cases.

- **Lead-based Paint Inspections (Short-term)**

Due to the hazards that lead-based paint imposes on residents, the REAC inspection protocol will be expanded to include the assessment of properties for lead-based paint. Hand-held x-ray fluorescence (XRF) analyzers will be used to collect data on lead-based paint content.

- **HUD-Owned Property Inspections (Short-term)**

The Single Family Inspection Pilot Program would add foreclosed single family properties to the housing portfolio that the REAC currently inspects under the Physical Assessment Subsystem. This will provide independent and objective assessments of property condition at a given point in time, and will enable a level of oversight previously unavailable within the Department to ensure that the foreclosed properties have been preserved and protected by lenders according to regulatory standards.

- **Davis-Bacon Act Wage Matching (Short-term)**

In order to monitor contract compliance with the Davis-Bacon Act, REAC will design and implement a web-based system that compares applicable Davis-Bacon Act wage determinations and construction contractor weekly payroll records. The Davis-Bacon Act requires the payment of an established “prevailing” wage to all laborers and mechanics on all contractor projects. Contractors will be required to electronically submit their certified payroll information to REAC, which will assess the data and refer potential violations to the Office of Labor Relations and DEC.

Performance Measures 3.2

Indicators for successful accomplishment of Objective 3.2 would primarily focus on improving HUD’s public and internal image with citizens, business partners, oversight agencies, and Congress. In developing performance measures for specific projects, planners will consider:

- Increases in data accuracy;
- Decreases in occurrences of fraudulent activity; and
- Improvements in the record-keeping of security breaches and reprimands.

Objective 3.3

Create a dynamic work environment by fostering collaboration and teamwork, and improving technology and business integration throughout the Department.



Strategic Outcomes 3.3

The successful accomplishment of Objective 3.3 would create outcomes such as:

- The walls between separate legacy systems would be removed and Internet technology would allow standardization and consistency between electronic databases and information;
- All employees would have knowledge management tools that allow them to search and receive information on programs, projects, and contracts with descriptions, status, and contact information;
- Employees would have message boards, online forums, and other interactive communication tools to share ideas; and
- Employee's work and collaboration would not be limited by physical distance and/or location.

Project Initiatives 3.3

Currently, HUD delivers a wide range of internal information for employees through its intranet, HUDweb, which will soon be renamed HUD@work. Created in 1996, HUDweb has over 500,000 visits each month and over 50 internal work processes available online. HUDweb allows employees to:

- Log into certain HUD information systems such as the Tenant Rental Assistance Certification System;
- Search for a Statement of Work in the Contract Café;
- Take Government Technical Representative (GTR) training; and
- Change personnel information in the Employee Express System.

Employee Express is an automated system that gives employees direct control over common payroll and personnel actions without having to fill out forms, mail documents, or visit the Office of Human Resources.

The Information Technology Investment Portfolio System (I-TIPS) consolidates HUD's IT capital planning and investment control process by ensuring all new and existing technology efforts go through one standardized selection, control, and evaluation process. This system achieves Objective 3.3 by improving HUD's business and technology integration, and Objective 3.2 by improving the stewardship of HUD's resources.

The following short-term initiatives would focus on improving collaboration and reducing completion time for labor-intensive processes:

- **Electronic Concurrence (Short-term)**

Electronic Concurrence would provide employees and supervisors with the capability for principal staff to sign-off on HUD-wide correspondence, policies, and guidance. The electronic concurrence process would use electronic signature and digital technology to minimize the current paper-intensive process.

- **Training Registration (Short-term)**

The training registration initiative would permit employees and supervisors to register, approve, and manage their training online.

- **Travel Management System (Short-term)**

Currently being developed as a LAN-based system with a goal of eventually being web-based, the HUD Travel Management System would automate the travel process from authorization to reimburse-

ment. Once developed, it would be integrated with disbursement and accounting systems and the integrated HR system.

- **Virtual Teams (Short-term)**

The virtual teams concept currently being piloted in the Office of Multifamily Housing uses sophisticated videoconferencing technology to allow individuals working in numerous locations to interact directly with each other and to share documents online. In the long-term, this opportunity would enable HUD employees in all offices to work more effectively together and with business partners, as well as balance workloads. More specifically, FHA closings, which traditionally require the buyer, seller, broker, and lender to meet physically, would be conducted virtually.

- **Integrated Knowledge Management System (Short-term)**

An integrated knowledge management system would be based on HUDweb's current capabilities and serve as a one-stop shop for information on all work activities. HUD employees would log on to the new HUD@work and view a personalized interface. In addition, employees would be able to check daily meetings and events, receive manager updates and weekly goals, view reports, access data, and get tailored news and information affecting their work-related interests. This opportunity applies the concept of "myyahoo.com" to employees.



Performance Measures 3.3

Indicators for the successful accomplishment of Objective 3.3 would primarily focus on improving the quality of HUD's knowledge management, minimizing the time spent on non-value-added tasks, and increasing the coordination of internal resources. In developing performance measures for specific projects, planners will consider:

- Decreases in the number of systems needed to complete transactions;
- Decreases in the time spent on administrative tasks;
- Increases in the knowledge of HUD activities and programs by employees;
- Increases in the communication between and within offices; and
- Increases in the collaboration and information sharing between employees.

Objective 3.4

Increase HUD employees' understanding and usage of eGovernment and Internet technology.

Strategic Outcomes 3.4

The successful accomplishment of Objective 3.4 would create outcomes such as:

- HUD employees would be able to receive electronic training, job/career advice, and skill development, as needed, using self-directed courses, education kits, and an electronic job assistant; and
- Employees would logon to HUD's intranet and receive a customized front-end that tailors information according to their job function and role. For example, employees would see key messages from their manager, news affecting their work, and programs directly affecting their job.



Project Initiatives 3.4

Currently, HUD has an annual "Web Day" that teaches HUD employees about the products, services, and information available on HUDweb and HUD.gov. Web Day focuses on successful usage of HUD's Web site, information from HUD's customer focus groups concerning the Internet, and new additions to both HUDweb and HUD.gov.

In the short-term, HUD will play a very aggressive role in ensuring that all HUD employees understand the transformation of HUD to eHUD, how eGovernment initiatives will affect their work, and how best to use technology to work with citizens, business partners, and each other. A series of educational and marketing materials will be developed. eHUD opportunities will also be integrated with HUD's Training Academy to further the usage of electronic technology.

The following short-term initiative explains the idea of a virtual university for employees.

- **Virtual University (Short-term)**

The Virtual University would initially be developed for HUD employees. It would be integrated with HUD's Training Academy

and leverage a national and local network of curriculum providers and online education forums. For employees, the Virtual University would provide tutorials on how to use new technologies and work more effectively, as well as educational seminars to discuss new trends in a particular field.

As the University's capabilities are further developed, HUD will incorporate courses and educational materials for business partners. For this audience, the Virtual University would provide tutorials on how to integrate technology into their business, educational training and resources, and "how-to" interactive courses, such as writing a business plan, financial management, or selecting an effective Board of Directors.

Performance Measures 3.4

Indicators for the successful accomplishment of Objective 3.4 would focus primarily on increasing employees' satisfaction with HUD's internal resources. In developing performance measures for specific projects, planners will consider increases in the:

- Number of completed employee annual training plans;
- Percentage of HUD employees who use the Internet regularly to satisfy training and educational needs;
- Number of virtual courses; and
- Number of HUD business partners enrolled in virtual courses.



Implementation Path

Overview

The success of HUD's future opportunities, as represented in this eGovernment Strategic Plan, will depend upon how effectively the Department addresses several constraints and challenges. The Implementation Path consists of the following components:

- **Schedule.** The schedule displays a high-level time frame of GPEA compliance activities, short-term initiatives, long-term opportunities, and infrastructure enhancements; and identifies immediate next steps.
- **Required Capabilities.** The Required Capabilities section identifies the capabilities that must be in place for the successful implementation of eGovernment.
- **IT Capital Planning.** For eGovernment to be successful at HUD, it must be closely integrated as a priority in the IT Capital Planning process.
- **Enterprise Architecture.** A sound Enterprise Architecture should provide a strategic base for HUD's eGovernment initiatives.
- **IT Infrastructure.** As HUD continues to expand its eGovernment services, improved IT infrastructure support will become increasingly important.
- **Privacy/Security.** Proper safeguards must be in place to protect the security/privacy of HUD's beneficiaries, business partners, and employees, as well as to protect Government resources from fraud, waste, and abuse.
- **Governance.** A clear governance structure for eGovernment implementation will be crucial to ensure quality, consistency, and proper allocation of resources for each initiative.
- **Business Process Improvement.** Transforming HUD into eHUD will require a streamlining and/or redesign of current business processes.
- **Data Management/Quality.** eGovernment will be successful only in the context of accurate, relevant information.
- **Accessibility.** eGovernment initiatives and activities must be inclusive of the disabled.
- **Education and Training.** Extensive education and training about

new IT capabilities and changing business functions will be necessary to ensure widespread acceptance, development, and maximum usage by HUD stakeholders of eGovernment initiatives.

- **Business Partner and Industry Cooperation.** Business partners and industry groups should be involved during each step of implementing eGovernment initiatives at HUD.
- **Executive Sponsorship.** Continued strong leadership is required for HUD's eGovernment efforts to be successfully implemented enterprise-wide.

Schedule

HUD's FY 2001 IT Capital Planning process emphasized strengthening the IT infrastructure. This emphasis represents a commitment to adequately investing in the essential foundations necessary to support web-based initiatives. As shown in Figure 8, GPEA efforts are ongoing and are required to be completed by October, 2003; short-term initiatives will be pursued from mid FY 2001 through the end of FY 2003; and long-term opportunities will be pursued from FY 2002 through FY 2005.

Figure 8. Implementation High-level Timeline

	FY 2001				FY 2002				FY2003				FY2004				FY2005			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Infrastructure Enhancements																				
GPEA Compliance																				
Short-Term Initiatives																				
Long-Term Initiatives																				

Immediate Next Steps

HUD will prioritize the short-term initiatives and long-term opportunities presented in this Plan. The Office of the Chief Information Officer (OCIO) will work with HUD's program offices to develop detailed business cases, feasibility studies, cost/benefit analyses, risk assessments, and implementation plans for high-impact initiatives and opportunities. This analysis will be integrated into the IT Capital

Planning process. Required Business Process Improvement (BPI) efforts, compliance with the Enterprise Architecture, and IT infrastructure enhancement to support the eGovernment initiatives are also critical elements that will be considered when determining priorities and time frames.

Additionally, to support the development and implementation of eGovernment initiatives, the OCIO will develop departmental policies, including those that affect the use of electronic signatures and electronic records management at HUD.

Required Capabilities

This section details the capabilities HUD must have in place for a successful eGovernment program.

IT Capital Planning

Currently, the decision-making process for new technology investments is handled through the annual IT Capital Planning process. The Technology Investment Board Working Group (TIBWG) reviews business cases, feasibility studies, work plans, and cost-benefit analyses for all IT investments that project sponsors from the program offices submit for funding as part of the IT Capital Planning process.

Beginning in FY 2001, this eGovernment Strategic Plan and the OMB GPEA Compliance Submission will be integrated into the IT Capital Planning scoring process to help prioritize eGovernment initiatives. Additionally, eGovernment efforts will be further integrated with IT Capital Planning activities through each quarterly control review to ensure that eGovernment initiatives are sufficiently justified to receive final budget approval by the Technology Investment Board Executive Committee (TIBEC), which is comprised of HUD's most senior executives, including the Deputy Secretary and Assistant Secretaries, and chaired by the Secretary.

Enterprise Architecture

A sound enterprise architecture is an essential component of HUD's eGovernment strategic initiatives. The enterprise architecture should provide a strategic base of information assets that define business needs; the information necessary to support them; the technologies necessary to conduct business activities; and transitional processes for implementing new technologies in response to changing business needs. The enterprise architecture should provide a blueprint of the baseline, transition, and target architectures necessary to support HUD's eGovernment initiatives.

The enterprise architecture's role is to enable:

- Faster response to changing business needs — integrated solutions are easier to visualize; areas of overlooked or missing information are highlighted;
- A knowledge base repository — offers readily available pool of information about IT resources for quick and informed decision-making; and
- A technical reference model with approved technology standards — research on emerging technologies is shared enterprise-wide.

IT Infrastructure

Implementation of the eGovernment initiatives described in this Plan requires that HUD have the technology to support a world-class Internet presence. Successful implementation will require an in-depth analysis of HUD's IT infrastructure and specific Internet technologies to support the major efforts presented in the eGovernment Strategic Plan.

IT Infrastructure Key Principles:

- **High Performance Capacity.** Capacity planning for servers and bandwidth will be critical. The eGovernment Strategic Plan provides a comprehensive list of current eGovernment initiatives and planned initiatives over the near term. This information can be used as a foundation for capacity planning of both the Enterprise Architecture and IT Infrastructure Planning efforts.
- **Ease of Expansion.** Scalability, or the ease with which a system can be expanded, will be central to the success of Internet-related efforts. The following are essential components:
 - A documented baseline technical architecture;
 - A detailed plan of IT infrastructure utilization based on the future impact of eGovernment initiatives; and
 - A target infrastructure that consolidates legacy technologies and expands technologies that support eGovernment initiatives.
- **Consistent Reliability.** Technology infrastructure must guarantee access and availability to all users, in all locations, and at all times. Poor performance and non-functioning HUD applications can significantly hinder the usage and success of HUD's eGovernment efforts.
- **Interoperability and Ease of Maintenance.** HUD's infrastructure must support the capability to interact with systems that are inside and outside the Department. Selecting open-standards-based solutions will ease the burden of maintenance across the enterprise.

IT Infrastructure Recommendations:

In order to optimize functionality of eGovernment initiatives and opportunities, the following recommendations should ensure a proper technology infrastructure:

- Measure the down-time of HUD.gov, HUDweb, and critical web-based applications. Based upon an analysis of these measurements, take appropriate actions to achieve an acceptable level of performance.
- Perform a detailed analysis of HUD's web-related infrastructure, including bandwidth capabilities, broadcasting capabilities for webcasts, and development and implementation of technologies needed to support the initiatives in this Plan.
- Conduct capacity planning for HUD.gov, HUDweb, and critical web-based applications using projections of future volumes and transactions.
- Select and procure compatible, scalable, and industry-standard hardware and software across HUD.
- Use a standard platform and tools.
- Perform regular research into emerging technologies to enable HUD to implement them in a timely manner.

Web-specific Technologies to Support HUD's eGovernment Strategic Plan:

- **My HUD.** My HUD is technology that will allow a personalized view for any user accessing HUD.gov or other HUD-related Web sites. This cross-cutting technology is threaded throughout many of the initiatives and opportunities.
- **Online Chat.** HUD already has online chat capability; however, real-time chat technology must be developed to increase communication and information exchange.
- **Webcast.** HUD's current webcast technology is limited by the number of concurrent users both internal and external to HUD. HUD's webcast technology should be expanded to reach and service all of HUD's staff.
- **Virtual Teams.** Virtual teams combine enterprise-wide videoconferencing capabilities together with the ability to work on shared documents. Spaces would be set aside to hold virtual meetings. Individual desktop videoconferencing capability would be available to all HUD employees.

- **Single Sign-On.** Users who sign onto HUD systems would have one ID and one password. A unique identifier would link all users to a standard set of information related to the activities they perform at HUD. For example, “pre-entered” data will prevent users from having to enter certain pieces of information (e.g., name and address) multiple times. Redundant data entry across systems would thus be eliminated.

Privacy and Security

Protecting privacy and ensuring security are key components of a successful eGovernment program. The public, HUD’s business partners, and oversight agencies, such as OMB and GAO, all have high demands for HUD to ensure secure transactions and protection of privacy. The Government cannot realize the full potential of the Internet until citizens are confident that their privacy will be protected. Federal agencies are currently required to post clear privacy policies to any known major entry points, as well as at any webpage where substantial personal information is collected from the public. Each policy statement must clearly and concisely inform visitors to the site what information HUD collects about individuals, why HUD collects it, and how it will be used.

Ensuring secure Internet transactions provides a challenge because Internet technology was inherently designed to make information and communication freely available with few restrictions. Figures 9 and 10 depict the various security threats posed by eGovernment and potential solutions to those threats. HUD’s approach to security as it relates to eGovernment is described through the following four components: policy, procedure, monitoring, and management.

Figure 9. eGovernment Security Threats

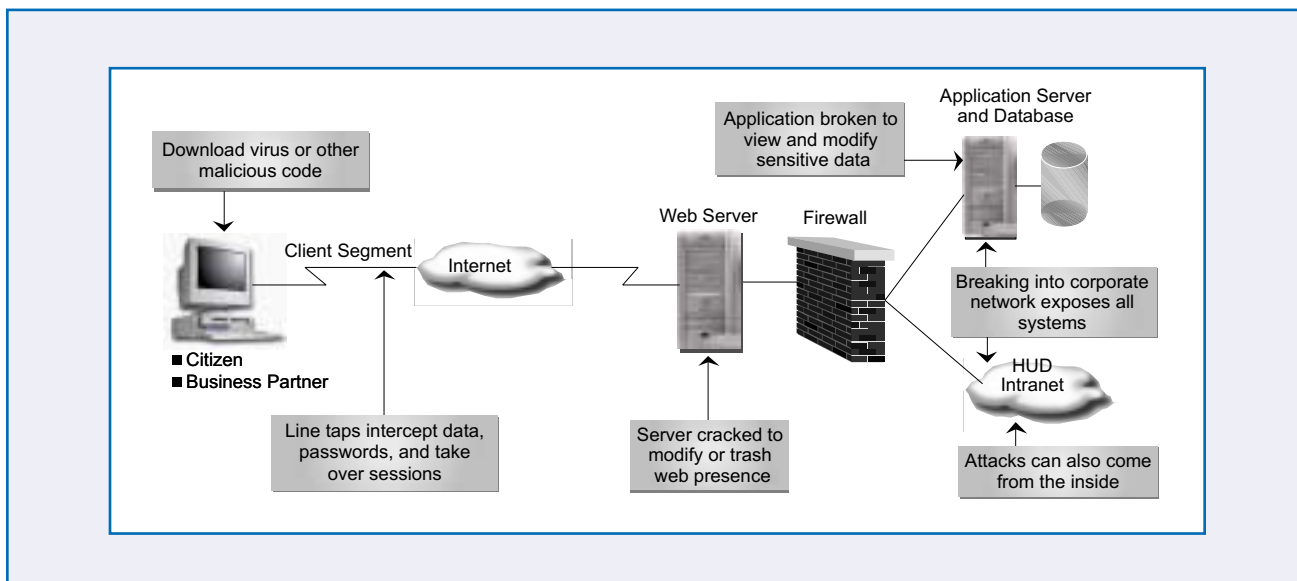
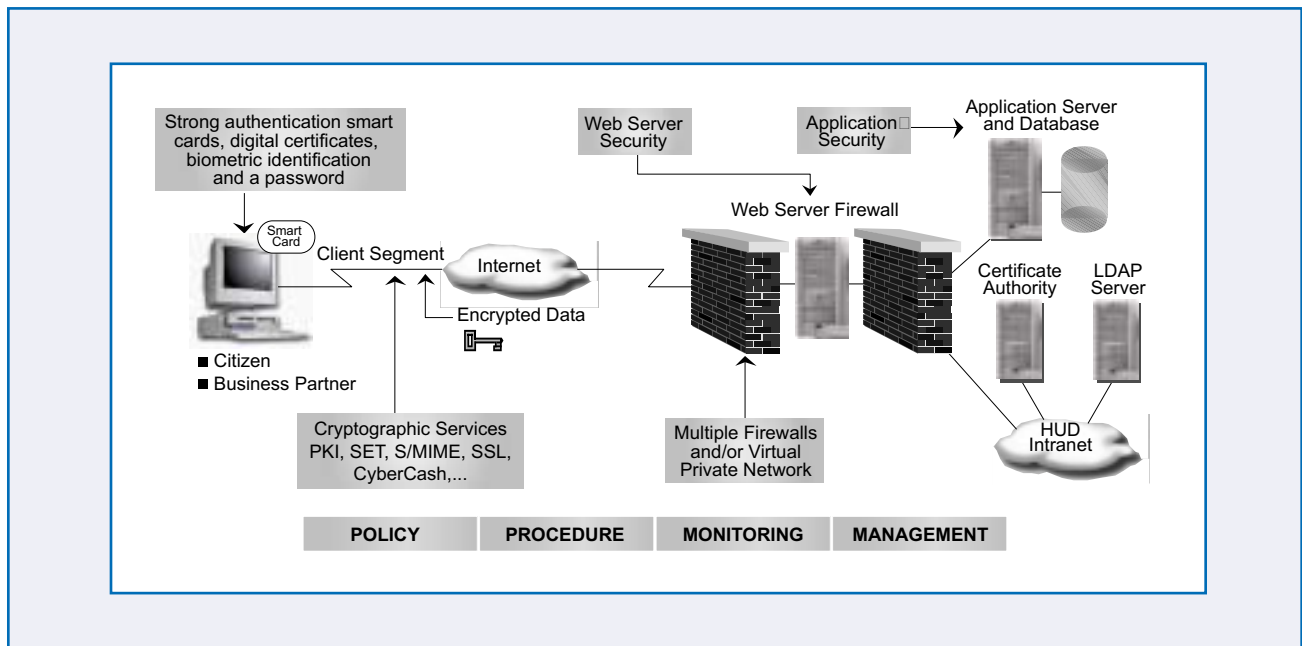


Figure 10. eGovernment Security Solutions



Policy. HUD has rigorous security and privacy policies in place to ensure that its critical missions are achieved and that undesired events are either prevented or detected and corrected in a timely manner. eGovernment heightens the need for strict adherence to these policies. HUD-wide policies that require further development include:

- Electronic signature and the potential need for a Public Key Infrastructure (PKI);
- Integration with Government-wide PKI efforts;
- Retention of electronic documents; and
- Protection of privacy of all citizens, business partners, employees, and HUD data.

Procedure. HUD has well-established procedures for privacy and security, but its evolving eGovernment services require further development of procedures in the following areas:

- Privacy of citizens, employees, and business partners must be ensured, which will pose a challenge as the demand for customized service increases and unique criteria must be established for each user;
- Mobile eGovernment technology, such as initiatives involving hand-held devices; and

- Business continuity and contingency issues. Essentially, whenever a Web site in a web-centric organization is closed, no business is conducted.

Monitoring. HUD's Information Assurance Program focuses on procedures and controls that limit or detect access to its assets to guard against the loss of the integrity, confidentiality, accountability, and/or availability of these critical resources.

These procedures and controls provide reasonable assurance that resources such as data files, application programs, and computer-related facilities and equipment are protected against unauthorized modification, disclosure, loss, or impairment. They include physical controls, such as keeping computers in locked rooms to limit physical access; and technical controls, such as security software programs designed to prevent or detect unauthorized access. In the event of security violations, Incident Response Handling and Reporting procedures are enacted.

Management. Many security weaknesses result from failure to implement security features and architectures correctly. Examples of these instances include capacity limitations, partially implemented software, and inadequate performance and application testing. HUD's Critical Infrastructure Protection Program within the OCIO provides a framework for scheduled activities for managing risk; developing security policies, awareness, and training programs; assigning responsibilities; and monitoring the adequacy of the ongoing implementation of HUD's physical and information systems security controls.

Governance

Successful governance of eGovernment efforts will require effective leadership and support from HUD's executives and a clear organizational structure. The OCIO has developed the eGovernment Strategic Plan in an effort to determine HUD's current capabilities and future direction for departmental eGovernment initiatives and opportunities. Because many of the eGovernment initiatives have both technology and program implications, it is important to have firm leadership and sponsorship in both arenas.

The eGovernment Working Group will monitor the progress of eGovernment initiatives over fiscal years to ensure effective implementation as determined by the program areas, and update the eGovernment Strategic Plan, as necessary.

The Department will identify the structure, roles, and processes that support decision-making across the enterprise. Guiding principles for governance include:

- **Clearly Defined Roles and Responsibilities.** Outline specific areas

of responsibilities and corresponding parties. HUD's program areas, the OCIO, and the Departmental Web Team all have specific responsibilities, and protocols must be developed for coordination between each organization.

- **Centralized Decision-making Structure.** Establish standards, funding, and performance measurement across the organization.
- **Coordinated Development and Maintenance.** Ensure that eGovernment initiatives are developed and maintained in a collaborative manner with all parties involved taking an active role and providing input toward similar goals and objectives (i.e., ensure that content providers, hardware/software developers, and business process improvement activities are consistently involved and aligned with the IT Capital Planning process, Enterprise Architecture, Data Management and Quality, and Critical Infrastructure Protection/Security efforts at HUD).

Business Process Improvement (BPI)

- Based on the principle that it is better to streamline and reduce process steps before automating, business process improvement must be considered when implementing eGovernment solutions that are core business functions. This is a requirement under the Clinger-Cohen Act of 1996.
- BPI can help realign and integrate resources to provide better service to HUD customers.

Data Management and Quality

- HUD's Data Management Framework provides governance for data quality and standards:
 - Highlights areas of inaccurate and redundant data, and
 - Centralizes access to shared HUD data.
- Data management and quality improvement efforts will contribute to the success of eGovernment by providing accurate data to HUD employees, customers and business partners, and proper information storage.

Accessibility

Section 508 of the Rehabilitation Act requires equal access to the Federal Government's electronic and information technology. The law applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology. Federal agencies must ensure that this technology is accessible to employees and the public. eGovernment initiatives must be developed in adherence to Section 508 requirements.

Education and Training

For the initiatives presented in this Plan to be implemented successfully, HUD's employees, business partners, and beneficiaries must possess an awareness and understanding of general eGovernment concepts and the specific services HUD provides via eGovernment technology.

As part of a broad eGovernment marketing campaign, a HUD eGovernment Training program will be developed in accordance with the initiatives implemented. The training program will focus on improving HUD employees' knowledge of HUD services available to citizens, business partners, and employees electronically. The program will address common challenges, provide a tour of the current environment (standard desktop applications as well as HUD-specific systems), and teach best practices for using the Internet and HUD capabilities.

The overall goals of this program include the following:

- Ensure that HUD employees are provided with the guidance, empowerment, skills, and tools needed to utilize the Internet effectively;
- Help minimize the negative impact of unexpected changes in business processes;
- Help increase the level of ownership through familiarity; and
- Help foster employee technical skills.

Similar training must also be expanded to business partners and citizens to ensure that they possess the comfort and skills required to succeed in interacting with HUD electronically. HUD must continue to develop its initiatives geared toward bridging the digital divide, and explore opportunities to increase computer-focused educational opportunities for citizens and business partners.

Business Partner and Industry Cooperation

For HUD to implement eGovernment successfully, we must work closely with other Government agencies and our private sector business partners. Business partners should be involved at each step in developing eGovernment initiatives as a means of sharing best practices and ensuring business partners' ability to participate in new efforts.

Executive Sponsorship

The eGovernment Strategic Plan, including each of the short- and long-term initiatives and opportunities, is supported by HUD's executive management. Strong leadership is required for the successful

implementation of any type of vision. HUD currently has many eGovernment success stories, none of which would have been possible without strong, active executive leadership and support for those projects. If momentum is to be sustained, this type of sponsorship will remain critical throughout the transformation of HUD to eHUD.

Executive sponsors legitimize a change initiative such as eGovernment through their visible show of support. They must be prepared to:

- Maintain visible commitment to implementing eGovernment;
- Build citizen, business partner, and employee awareness of and commitment to implementing eGovernment;
- Represent the formal organizational authority required to sanction, launch, and sustain eGovernment initiatives; and
- Allocate essential resources to support eGovernment efforts.

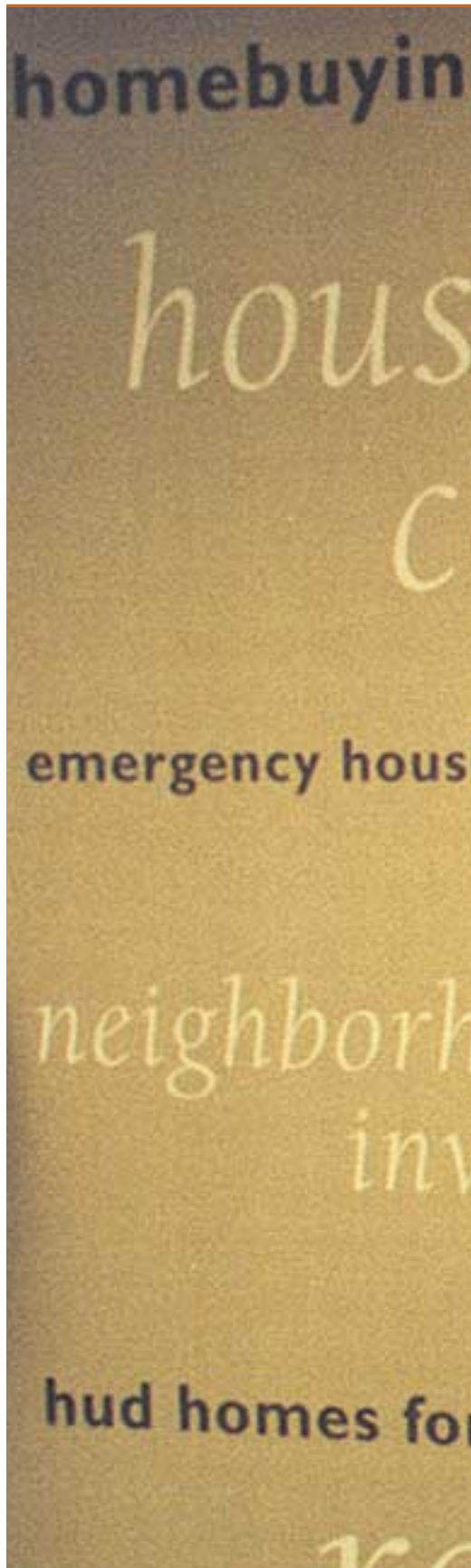
Conclusion

As new communications technologies become increasingly more prevalent and pervasive in the twenty-first century, it is fundamentally important for the Department of Housing and Urban Development to include them in its plans for future success. HUD is charged with ensuring that the American dream of homeownership is attainable for all by promoting fair and affordable housing and prosperous communities in our nation. Therefore, the Department must holistically embrace creative means of fulfilling its mission and provide services to the American public in the most effective and efficient manner.

The eGovernment Strategic Plan clearly articulates a vision for how HUD will respond to the demands of the public, embrace the changes inherent in the new economy, capitalize on innovations in the housing industry, and achieve legislative goals.

Most of the initiatives in this Plan span across the Department and will depend substantially on collaboration between different program areas, field offices, and HUD's business and industry partners. Implementing this Plan will require continued strong leadership, continued motivation and commitment, and input from all of HUD's stakeholders.

Most importantly, HUD's eGovernment Strategic Plan establishes a unified enterprise-wide vision, a concrete framework in which HUD's leadership and stakeholders can conceptualize new initiatives and a discrete set of opportunities for the Department to explore within the next 3-5 years. When fully implemented, this Plan will fundamentally transform the way HUD does business.



Acronym Key

Acronym	Definition
AFDC	Aid to Families with Dependent Children
BOP	Business and Operating Plan
BPI	Business Process Improvement
BPR	Business Process Reengineering
CIO	Chief Information Officer
CPD	Community Planning and Development
DEC	Departmental Enforcement Center
DGMS	Departmental Grants Management System
EA	Enterprise Architecture
EGWG	eGovernment Working Group
EIS	Empowerment Information System
EPA	Environmental Protection Agency
ESIGN	Electronic Signature in Global National Commerce Act
FHA	Federal Housing Administration
FHEO	Fair Housing and Equal Opportunity
GAO	General Accounting Office
GNMA	Government National Mortgage Association
GPEA	Government Paperwork Elimination Act
GPRA	Government Performance and Results Act
GTR	Government Technical Representative
HR	Human Resources
I-TIPS	Information Technology Investment Portfolio System
M2M MIS	Mark-to-Market Multifamily Integration System

Acronym Key *continued*

Acronym	Definition
NAHRO	National Association for Housing and Redevelopment Officials
OCIO	Office of the Chief Information Officer
OMHAR	Office of Multifamily Housing Assistance Restructuring
OMB	Office of Management and Budget
PAE	Participating Administrative Entity
PHA	Public Housing Authority
PHADA	Public Housing Authorities Directors Association
PIC	Public and Indian Housing Information Center
PIH	Public and Indian Housing
PKI	Public Key Infrastructure
REAC	Real Estate Assessment Center
ROSS	Resident Opportunity and Supportive Services
TARC	Troubled Agency Recovery Center
TDHE	Tribally Designated Housing Entity
TIBEC	Technology Investment Board Executive Committee
TIBWG	Technology Investment Board Working Group

Glossary

Business Process Improvement

BPI is a management approach to rethinking and redesigning business processes to achieve dramatic improvements in performance. Business Process Improvement will achieve and sustain quantum leaps in performance by aligning and integrating HUD's people, business processes, and technology with its strategic imperatives. Technology is an enabler of BPI, not a substitute for examining and reengineering business processes. BPI does not use technology to automate existing tasks, instead it uses the latest advances in technology to assist in the reengineered business.

eCommerce

eCommerce (electronic commerce) is typically thought of as conducting financial or business transactions by electronic means. It refers to buying and selling goods and services and transacting business on the Internet, especially the World Wide Web. eCommerce can be business to business (B2B), business to consumer (B2C), Government to business, or Government to consumer.

eBusiness

eBusiness (electronic business), derived from "eCommerce," is the conduct of business on the Internet, not only buying and selling but also servicing customers and collaborating with business partners. The term refers to organizations that are converting their business processes to use the Internet to buy parts and supplies from other companies, to collaborate on selling opportunities, and to do joint research.

*eEconomy (*Also synonymous with Digital Economy)*

The term eEconomy refers to the macro environment in which the exchange of goods and services are being transformed using an electronic medium. The term implies that the majority of economic activity and value are being derived by the electronic or digital transfer of information, products, and services. The economy is largely being fueled by the increasing usage of the Internet by the public and businesses.

eForms

An eForm (electronic form) is a computer program version of a paper form. In addition to eliminating the cost of printing, storing, and distributing pre-printed forms, eForms can be filled out faster because

the programming associated with them can automatically format, calculate, look up, and validate information for the user. With electronic submission of completed forms, including the use of digital signatures, approval cycle times can be significantly reduced and the cost of reentering data can be eliminated. Compared to paper forms, eForms allow more focus on the business process or underlying problem for which they are designed (e.g., expense reporting, purchasing, or time reporting).

eProcurement

eProcurement is the business-to-business purchase and sale of supplies and services over the Internet. Typically, eProcurement Web sites allow qualified and registered users to look for buyers or sellers of goods and services. Depending on the approach, buyers or sellers may specify prices or invite bids. Transactions can be initiated and completed. Ongoing purchases may qualify customers for volume discounts or special offers. eProcurement software may make it possible to automate some buying and selling and is expected to be integrated with the trend toward computerized supply chain management.

Internet

The Internet is a worldwide system of computer networks — a network of networks in which users at any one computer can, if they have permission, get information from any other computer (and sometimes talk directly to users at other computers). It was conceived by the Advanced Research Projects Agency (ARPA) of the U.S. Government in 1969 and was intended to create a network that would allow users of a research computer at one university to be able to "talk to" research computers at other universities. The Internet is a public, cooperative, and self-sustaining facility accessible to hundreds of millions of people worldwide. Technically the Internet is defined by its use of a set of protocols called TCP/IP (Transmission Control Protocol/Internet Protocol). Two recent adaptations of Internet technology, the intranet and the extranet, also make use of the TCP/IP protocol. The most widely used part of the Internet is the World Wide Web (often abbreviated "WWW" or called "the web").

Fully electronic environment

A "fully electronic environment" represents a business process or function that can be initiated and completed by using an electronic medium (i.e., paper is not necessary to complete any part of the transaction).

Portal

A “portal” is an Internet gateway that guides users to the unique services they need and provides the enterprise with the underlying business functions required to deliver eCommerce solutions:

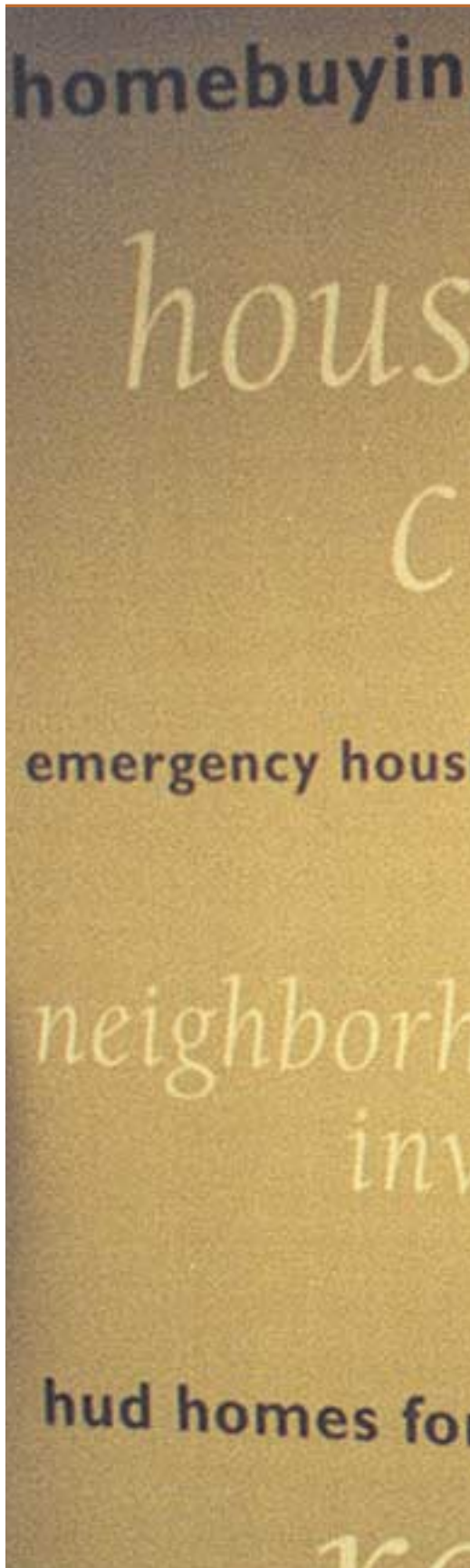
- On the front end, the portal is an attractive entry point where user functions and content are well organized and easily accessible.
- On the back end, the portal represents a set of transaction capabilities that allow products and services to be delivered via the Internet.

Web site

A Web site is a collection of files on a particular subject that includes a beginning file called a home page. For example, most companies, organizations, or individuals that operate Web sites have a single address that is their home page address. From the home page, a user can connect to all the other pages on that “Web site.” Web site is often confused with a webserver. A server in this context is a computer that holds the files for one or more sites. On one hand, a very large Web site may reside on a number of servers that may be located in different geographic locations. “Web-presence” has become increasingly used because it implies that a site is not tied to a specific geographic location, but is “somewhere in cyberspace.”

World Wide Web

A technical definition of the World Wide Web includes all of the resources and users on the Internet that are using the Hypertext Transfer Protocol. A broader definition comes from the organization that World Wide Web inventor Tim Berners-Lee helped found, the World Wide Web Consortium (W3C): “The World Wide Web is the universe of network-accessible information.” The World Wide Web provides access to millions of pages of information. Web-browsing is done with a web-browser, the most popular of which are Netscape Navigator and Microsoft Internet Explorer, and the appearance of a particular Web site may vary slightly depending on the browser that is used.



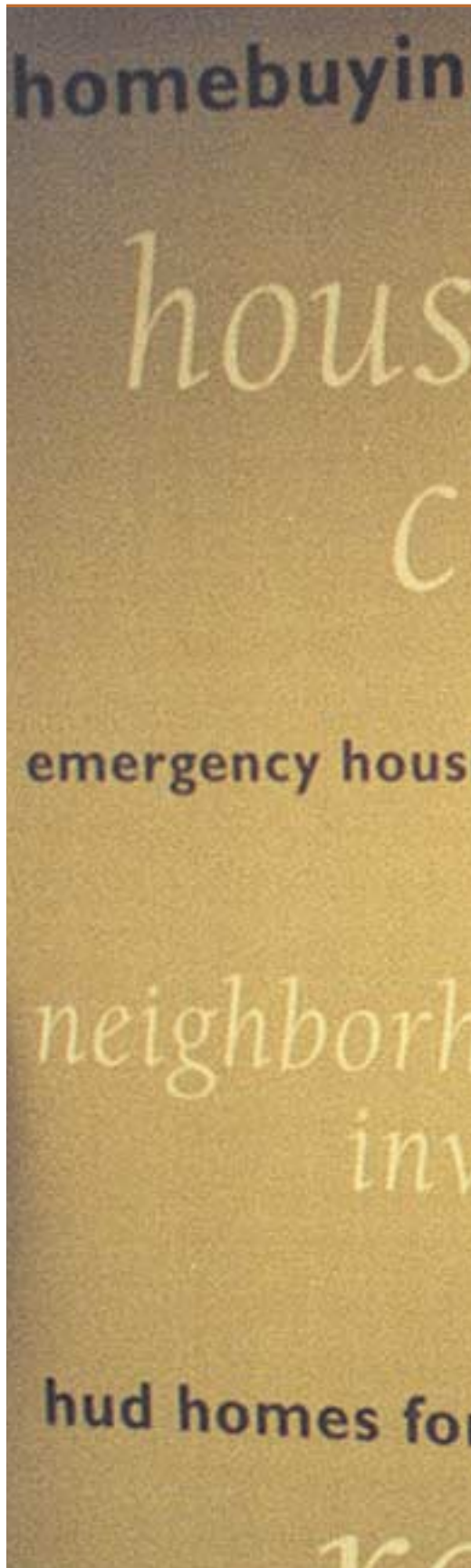
Appendix A: Methodology

To develop this Department-wide strategic plan for transforming HUD into eHUD, the Office of the Chief Information Officer (OCIO) followed a structured approach that ensured the Plan would support the Agency's mission, vision and goals in addition to helping HUD thrive in the rapidly expanding eEconomy. Representatives from Program Offices across HUD became involved from the outset when we established the eGovernment Working Group, whose members were appointed by their respective Assistant Secretaries (HUD's most senior executives).

The OCIO developed the strategic plan using the following steps:

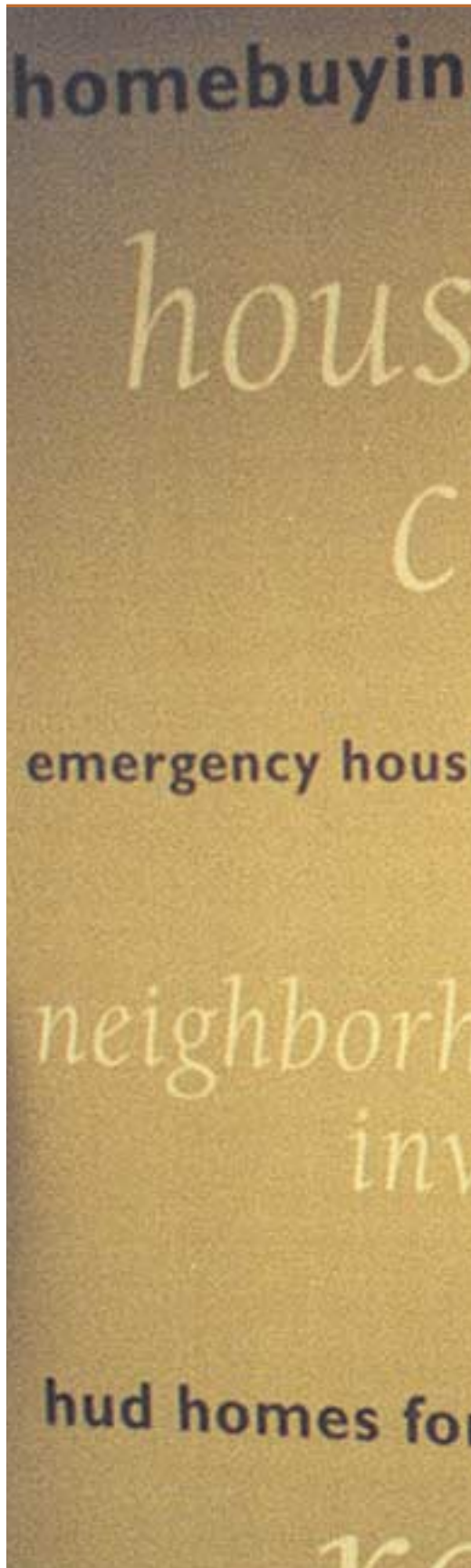
- 1. Capture high-level HUD vision:** Annual Performance Plan, Business and Operating Plan, HUD Strategic Plan, additional research and interviews with HUD executives.
- 2. Evaluate external market:** Citizen, business partner and employee needs, legislative imperatives, private and public sector best practices. We reviewed strategic eGovernment efforts at the Department of Defense, the Army, the Department of the Treasury, the Department of Commerce, and the U.S. Postal Service.
- 3. Define internal baseline:** Existing HUD eGovernment initiatives from HUDweb, HUD.gov, Inventory of Automated Systems, I-TIPS documentation, interviews, etc. The initial baseline was posted on HUDweb to obtain feedback from employees about these existing initiatives, as well as more general comments on eGovernment at HUD.
- 4. Generate eInitiatives and eOpportunities:** A synthesis of all previous steps, including gathering additional information for each specific initiative and opportunity. In addition to conducting extensive interviews and visioning sessions, we distributed a survey to Community Builders in several geographically dispersed field offices to capture their views of HUD's direct customers' needs.
- 5. Evaluate and refine eInitiatives and eOpportunities:** Interviews, brainstorming, and visioning sessions. We conducted a HUD-wide Deputy Assistant Secretary Visioning Session on August 11, 2000, and the Deputy Secretary held a HUD-wide Principal Staff Visioning Session on September 11, 2000.

In just three months, the OCIO worked with more than 75 individuals from all levels within all major program and support offices to develop the vision for eHUD. A number of people, up to the Assistant Secretary level, from each office participated in the effort through interviews, brainstorming workshops and executive visioning sessions.



Appendix B: HUD's Mission, Vision, Goals, and Objectives

Staking a Claim on the Future: HUD's Mission, Vision, Goals, and Objectives				
<p><i>HUD's Mission</i></p> <p>Promote adequate and affordable housing, economic opportunity, and a suitable living environment free from discrimination.</p>				
<p><i>HUD's Vision</i></p> <p>To be a high-performing, well-respected, and empowering partner with all levels of government, with the private sector, and with families and individuals.</p>				
Strategic Goal 1	Strategic Goal 2	Strategic Goal 3	Strategic Goal 4	Strategic Goal 5
1. Increase the availability of decent, safe, and affordable housing in American communities.	2. Ensure equal opportunity in housing for all Americans.	3. Promote housing stability, self-sufficiency, and asset development of families and individuals.	4. Improve community quality of life and economic vitality.	5. Ensure public trust in HUD.
Strategic Objective	Strategic Objective	Strategic Objective	Strategic Objective	Strategic Objective
1.1 Homeownership is increased.	2.1 Housing discrimination is reduced.	3.1 Homeless families and individuals achieve housing stability.	4.1 The number, quality, and accessibility of jobs increase in urban and rural communities.	5.1 HUD and its partners effectively deliver results to customers.
1.2 Affordable rental housing is available for low-income households.	2.2 Minorities and low-income people are not isolated geographically in America.	3.2 Poor and disadvantaged families and individuals become self-sufficient and develop assets.	4.2 Economic conditions in distressed communities improve.	5.2 HUD leads housing and urban research and policy development nationwide.
1.3 America's housing is safer, of higher quality, and disaster resistant.	2.3 Disparities in homeownership rates are reduced among groups defined by race, ethnicity, and disability status.	3.3 The elderly and persons with disabilities achieve maximum independence.	4.3 Communities become more livable.	



Appendix C: Legislation Affecting eGovernment at HUD

Executive Branch Directives

1. The **eGovernment Directive**, dated December 17, 1999, states that “as public awareness and Internet usage increase, the demand for on-line Government interaction and simplified, standardized ways to access Government information and services becomes increasingly important.” Specifically, the directive details the following tasks:
 - GSA, in coordination with the National Partnership for Reinventing Government, the Chief Information Officers Council, the Government Information Technology Services Board, and other agencies shall promote access to Government information organized by the type of service or information people may be seeking, as opposed to organized by Agency or Department;
 - Executive agencies or departments shall, to the maximum extent possible, make available on-line by December 2000, the forms needed for the top 500 services used by the public;
 - In accordance with GPEA, by October 2003, transactions with the Federal Government should be made available for on-line processing of services, where appropriate;
 - The heads of agencies shall continue to promote the use of eCommerce for ordering on Federal procurements;
 - The Department of Health and Human Services, the Department of Education, the Department of Veterans Affairs, the Department Agriculture, the Social Security Administration, and the Federal Emergency Management Agency shall make a broad range of benefits and services available through the private and secure use of the Internet; and
 - The heads of agencies shall develop a strategy for upgrading and expanding the use of the Internet that includes adopting private sector best practices.
2. The **eSociety Directive** is designed to “further promote the broader social benefits of the Information Age to the American people.” The Administration maintains that the Internet has the potential to “enhance civil society as well as boost e-commerce,” and that, used creatively, information technology can be “a powerful tool for tackling some of our toughest social challenges as well as fostering economic growth.” To help increase the societal benefits

of information technology to the American people, the President has directed agencies to take several actions including the following:

- **The Department of Agriculture** shall identify services that can be delivered electronically to rural Americans and tribal communities;
- **The Department of Education** and the Department of Labor shall work to remove legal and regulatory barriers to high-quality distance learning, and to increase awareness of the availability of distance learning as an alternative means of education and training;
- **The Department of Education and the National Science Foundation** shall develop a research agenda for making the Internet and information technology more usable by people with disabilities;
- **Health and Human Services** shall identify steps that can be taken to promote expanded access to higher quality, cost-effective health care to underserved rural and urban communities, and other health care applications of technology; and
- **The Department of Commerce** shall identify policies that will encourage more effective use of information technology by nonprofit organizations.

Oversight:

1. **The Office of Management and Budget** has issued guidelines for the development of GPEA implementation plans and will provide continued oversight.
2. **The Department of Commerce** will follow public Federal Information Processing Standards, as appropriate, to further the specific goals of GPEA. The Department will also develop guidance in the area of authentication technologies.
3. **The Department of Justice** will develop practical guidance on legal considerations related to agency use of electronic filing and record-keeping.
4. **The Department of Treasury** will develop policies for the use of electronic transactions and authentication techniques for use in Federal payments and collections, and ensure that these policies fulfill the goals of GPEA.
5. **The National Archives and Records Administration** will develop policies and guidance on the management, preservation, and disposal of Federal records associated with electronic Government transactions, and must give particular consideration to records issues associated with the use of electronic signature technologies.

6. **The General Services Administration** will support agencies' implementation of digital signature technology and related electronic service delivery.
7. **The General Accounting Office** has published guidelines — "Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity" — for effectively managing IT investments.

Legislation and Guidance

1. **Electronic Signatures in Global National Commerce Act of 2000 (ESIGN)** removes the legal barriers that had impeded the use of electronic technology to: (1) create and sign contracts, (2) collect and store documents, and (3) send and receive notices and disclosures.
2. The **Wireless Communications and Public Safety Act of 1999** promotes further deployment of the 911 number as the universal emergency assistance number in wireless networks.
3. The **Government Paperwork Elimination Act of 1998 (GPEA)** specifically provides for Federal agencies, by October 21, 2003, to give the public the option to submit information electronically; to maintain or disclose information to the public using electronic means; and to use electronic authentication methods to verify the identity of the sender and the integrity of electronic content. The law directs agencies to engage in the "acquisition and use of information technology, including alternative information technologies that provide for electronic submission, maintenance, or disclosure of information as a substitute for paper, and for the use and acceptance of electronic signatures."
4. The **Electronic Freedom of Information Act Amendments of 1998** created a specific procedure through which any person can exercise his or her general right to request and obtain access to particular federal agency records and data. Commonly called "eFOIA," the Act has increased demand for publications and reports from agencies, leading many agencies to allow their publications and reports to be electronically downloaded from their Web sites.
5. The **Clinger-Cohen Act of 1996** facilitates, encourages, and provides for the efficient and effective use of modern information technology by executive agencies. The Act seeks to increase the responsibility and accountability of departments and agencies in achieving substantial improvements in the delivery of services to the public and in other program activities through the use of modern information technology. Formerly known as the Information Technology Management Reform Act, this law specifically mandates that agencies and departments:

- Establish Chief Information Officers (CIOs) with defined duties and responsibilities;
 - Design and implement capital planning and investment controls; and
 - Use information technology as a strategic enabler of agency and departmental missions and business objectives, implementing information technology-related actions to enhance performance and results-based management.
6. The **Debt Collection Act of 1996** requires increased use of electronic commerce to improve cash and debt collection management.
 7. The **Paperwork Reduction Act of 1995** significantly changed many aspects of information collection by the Government. The Act requires agencies to plan for the development of new collections of information and the extension of ongoing collections well in advance of sending proposals to OMB. Complemented later by GPEA, the Act seeks to decrease the burden on the public by reducing the number of new data collection requests and streamlining existing data collection processes.
 8. The **Federal Acquisition Streamlining Act of 1994** established the Federal Acquisition Computer Network and increased agencies' flexibility in terms of procurement processes. Acquisitions are governed by OMB's Office of Federal Procurement Policy. This Act, and subsequent amendments and directives found in the Federal Acquisitions Regulations (FAR), provides the legislative impetus for electronic procurement. OMB will continue to advance the evolution of agencies' acquisition processes from paper to electronic media to save taxpayer dollars, expedite processes, and ease the burden on businesses.
 9. The **Government Performance and Results Act of 1993 (GPRA)** requires government agencies to link performance to results and fosters short-term business planning and long-term strategic planning. The law also requires that agencies develop performance plans that articulate their target performance goals and progress towards meeting these goals. Electronic government is a means by which agencies can fulfill these performance goals. The Act also encourages bureaus and offices within agencies, such as CIO and IT organizations, to improve service delivery and focus on results and customer satisfaction.
 10. The **Computer Security Act of 1987** provides for the security of Government information systems. The Act requires each agency with a Federal computer system to establish a security plan to protect the security and privacy of sensitive information.

In addition, the Act establishes a Computer System Security and Privacy Advisory Board within the Department of Commerce and directs the National Bureau of Standards to establish a computer standards program for Federal computer systems. Moreover, the Act requires that agencies provide periodic training for their employees on the management, use, and operation of computer systems.

11. **The Privacy Act of 1974** provides specific guidance to Federal agencies on the control and release of appropriate records.
12. As amended, **Section 508 of the Rehabilitation Act of 1973** requires Federal agencies to ensure that their electronic and information technologies provide people with disabilities access to information and data comparable to that of people without disabilities. This requirement applies to Federal employees as well as members of the general public that conduct business with the agency. Additional guidance regarding this Act and its implications for electronic Government has been issued by the interagency CIO's Council and the Department of Justice. Moreover, many Government Web sites are now compliant, using various certification standards and tools (e.g., "Bobby-approved" by the nonprofit Center for Applied Special Technology).
13. Finally, there are numerous other security- and records management-related regulations and directives that impact Federal agencies:
 - The **Federal Information Processing Standard Publications (FIPS Pubs)** are the official series of publications relating to standards and guidelines adopted and promulgated under the provisions of Section 111(d) of the Federal Property and Administrative Services Act of 1949, as amended by the Computer Security Act of 1987, Public Law 100-235. These publications provide the standards to be used by Federal organizations in specifying the use of cryptographic-based security systems to provide protection for sensitive or valuable data. These standards provide four increasing, qualitative levels of security intended to cover a wide range of potential applications and environments. The security requirements cover areas related to the secure design and implementation of a cryptographic module. These areas include basic design and documentation, module interfaces, authorized roles and services, physical security, software security, operating system security, key management, cryptographic algorithms, electromagnetic interference/electromagnetic compatibility (EMI/EMC), and self-testing.
 - The **X509 Standard** defines the basic requirements of technology components to be used in Federal IT processes. The three basic data structures to be used by the Federal PKI are the certificate,

cross certificate pair, and Certificate Revocation List (CRL).

- The **Minimum Interoperability Specifications for PKI Components (MISPC)**, produced in cooperation with ten industry partners through Cooperative Research and Development Agreements (CRADAs), provides a basis for interoperable PKI components from different vendors. The goal of these specifications is to foster interoperability among heterogeneous public key certificate management systems, and thereby provide security services to users in large communities. The MISPC specifies a minimal set of features, transactions, and data formats for the various certificate management components that make up a PKI. Moreover, the MISPC addresses certificate generation, renewal, and revocation; certificate validation; signature generation and verification; and other related issues.
- The **Management of Information Resources (OMB Circular A-130)** establishes the policies for the management of Federal information resources, and includes, as appendices, procedural and analytic guidelines for implementing specific aspects of these policies.
- The **Federal Records Act (36 CFR 1220)** defines Federal records and requires the establishment of agency programs to ensure adequate and proper documentation of organization, function, policies, decisions, procedures, and essential transactions.
- The **Critical Infrastructure Protection Plan (PDD 63)** specifies how vulnerabilities that may diminish HUD's ability to achieve its critical mission are to be minimized. The plan identifies the minimum essential functions that HUD must be able to carry out in an emergency and outlines how these functions are to be maintained. In addition, the plan provides for the continuous monitoring of and responsiveness to changes in threats, technology innovations, and improved risk reduction measures.

Appendix D: Housing Industry Innovators on the Internet

<i>Companies</i>	<i>Description</i>
Microsoft Home Advisor	Microsoft Home Advisor offers an integrated site with consumer services that range from finding a home and securing a loan to home improvement.
Improve.net	Improve.net empowers the average “do-it-yourself” citizen, giving them the tools they need to improve their homes by integrating all of their customer needs into one site. Users can create a personal profile by logging in and indicating their preferred interests in homeownership. The site has a “Product Showcase” with all products arranged by each room in the house.
Quicken.com	Quicken.com aggregates and integrates financial information and resources to provide real-time value-added services in the financial services industry.
Homestore.com	Homestore.com is a comprehensive online source for products, services and information related to living well in, building, buying, selling, decorating, remodeling, and maintaining a home. Homestore.com’s family of sites is the leading source for home and real estate-related information on the Internet, with a large home listing service and realtor locator.
Cephren.com	Cephren.com is a B2B online workplace for the global construction industry. Cephren enables owners, developers, architects, engineers, general contractors, sub-contractors, manufacturers, and distributors to coordinate all of their paperwork communications, design updates, project meetings, bidding, and procurement through one secure, web-based service.

<i>Companies</i>	<i>Description</i>
Fannie Mae	When the recent eSIGN bill was signed into law, Fannie Mae leveraged electronic signature technology to set a record for an entire home loan cycle: it was closed, recorded, and delivered to the secondary mortgage market in less than three hours, compared to the usual average of 45 days. The group involved in the mortgage transaction included eOriginal, Mortgage.com, Arvida Homebuilders, e-Cloz.com, Enterprise Title Inc., the Broward County Records Division, NewVision Systems Corp., the Attorneys' Title Insurance Fund Inc., Irwin Mortgage, and Fannie Mae.

Appendix E:

U.S. Department of Housing and Urban Development Current eGovernment Capabilities

Bureau	Program Title	Brief Description of Service	Information Being Provided	URL	Government Relationship	Status
ADMIN	Collaborative Meeting Center (CMC) Reservations	This Web site can be used to find out the CMC schedule, CMC policies and to make reservations for the CMC.	Information, policies, and reservations for the CMC.	http://hudweb.hud.gov/po/amm/cmc/cmc.htm	Government to Employee	Information Dissemination
ADMIN	Communities 2020	HUD's Community 2020 software is a multi-faceted planning, mapping and communications package that facilitates greater citizen and business partner participation. Users of the software can view local community and housing developments projects.	Most current HUD program information for use with 2020 software and maps that HUD citizens and business partners can use to view housing developments and community development projects.	http://www.hud.gov/adm/2020dat1.html	Government to citizen Government to Business	Transactions (end-to-end completed electronically)
ADMIN	Direct Distribution System	HUD's Direct Distribution System provides centralized distribution services to HUD clients, HUD employees, and the public nationwide. Materials requested include handbooks, forms, publications, posters, etc. Shipped via snail mail.	Handbooks, forms, publications, posters; and mortgage, ethics, Title 1, and labor relation letters.	https://www.hud.gov/dds/	Government to Employee Government to Business Government to Citizen	Transactions (end-to-end completed electronically)
ADMIN	Directives Review System	HUD's directive clearance center.	Directives.	http://hudweb.hud.gov/dirrev/	Government to Employee	Information Dissemination
ADMIN	eCash	This Web site provides access to Office of Administration applications.	Access to Office to Administration systems.	http://hudweb.apps6.hud.gov/po/h/cash/install.htm	Government to Employee	Transactions (end-to-end completed electronically)
ADMIN	Geocoding Service Center (GSC)	This Web site provides information about the Geocoding Service Center. Some of its many services include address list "scrubbing", online address validation, client/server access, etc.	Postal information.	http://hudweb.hud.gov/po/it/geocode/geo_home.htm	Government to Employee	Information Dissemination

Bureau	Program Title	Brief Description of Service	Information Being Provided	URL	Government Relationship	Status
ADMIN	HUD E-MAPS	HUD E-MAPS marry Community 2020 software with Environmental Protection Agency (EPA) databases. These maps provide decision-makers and citizens detailed, site-specific information about what the Government is doing to protect the environment.	Environmental Information; community and economic development information.	http://www.hud.gov/emaps	Government to Business Government to Citizen	Transactions (end-to-end completed electronically)
ADMIN	HUD Integrated Performance Reporting System (HIPRS)	This Web site provides a link to the HUD Integrated Performance Reporting System which is used to report goals and accomplishments.	Goals and accomplishments.	http://hudwebapps8.hud.gov/po/arh/bop/login/main_login.cfm	Government to Employee	Information Dissemination
ADMIN	HUD Client Information and Policy Systems (HUDCLIPS)	This Web site allows you to search database of official policies, forms and documents and download electronic copies.	Official policies, forms and documents.	http://www.hudclips.org/cgi/index_legis.cgi	Government to Citizen Government to Government Government to Employee Government to Business	Transactions (end-to-end completed electronically)
ADMIN	Inventory of Automated Systems	The Inventory of Automated Systems (IAS) provides information about the computer systems that support HUD businesses.	Information about computer systems that support HUD businesses.	http://lnshhq05p.hud.gov/itms/ias.nsf	Government to Employee	Information Dissemination
ADMIN	Library Catalog	This Web site allows you to search the contents of HUD library online.	HUD's library.	http://170.97.48.144/	Government to Employee	Forms only
ADMIN	Order Business Cards Online	This Web site allows you to pick a business card style and to download the form for ordering business cards. This form is completed and then submitted to your supervisor.	Information about ordering business cards and a downloadable form.	http://hudweb.hud.gov/po/ars/cards/Bzcards.htm	Government to Employee	Forms only

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ADMIN	Project Office Express	This Web site can be used to record project time.	Web interface to system.	http://hudwebapps5.hud.gov/po/i/p039/po_dtd/	Government to Employee	Transactions (end-to-end completed electronically)
ADMIN	Official Personnel File System	This Web site is used to link to the Official Personnel File System. This system is used to track official personnel files.	Personnel.	http://hudwebapps1.hud.gov/po/arh/opf/main/logon.CFM	Government to Employee	Information Dissemination
ADMIN	Retirement Benefits Estimate Request	This Web site allows you to send an e-mail request for an estimate for your retirement benefits.	Retirement benefit information.	http://hudweb.hud.gov/po/arh/buyreq.htm	Government to Employee	Transactions (end-to-end completed electronically)
ADMIN	Traveling Exhibits Information and Requests	This Web site allows you view information about HUD's Traveling Exhibit as well as send a request to use HUD's Traveling Exhibit.	Information about HUD's Traveling Exhibit.	http://hudweb.hud.gov/refs/texhibit/	Government to Employee	Transactions (end-to-end completed electronically)
CFO	HUD Travel Management System (HTMS)	Travel documents will be prepared on the traveler's computer and then electronically routed for approval and entering into HUD's HUDCAPS accounting system. Also, links to FedTravel.com site for user to query flight, car rental, and other travel costs.	Online processing of travel documents.	http://hudweb.hud.gov/po/f/htm/sintro1.htm	Government to Employee	Transactions (end-to-end completed electronically)
CFO	Online creation of financial reports from the Financial Data Mart	This Web site allows online creation of financial reports with data from the Financial Data Mart, including Trial Balances and SF 133 from HUDCAPS funds; HUDCAPS Suballotment Spending Control Table and project cost accounting. The site also includes posting models.	Trial Balances and SF 133 from HUDCAPS funds; HUDCAPS Suballotment Spending Control Table and project cost accounting reports; other information.	http://hudwebapps8.hud.gov/po/f/hudcaps/Reports/index.cfm	Government to Employee	Transactions (end-to-end completed electronically)

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CIO	I-TIPS	This Web site is the agency-wide tool for IT Capital Planning	Detailed descriptive and financial information about prospective and current IT projects and initiatives.	http://hudwebapps7.hud.gov/cgi/login/login.cfm	Government to Employee	Transactions (end-to-end completed electronically)
CPD	John J. Gunther Blue Ribbon Practices in Community Development Database (Best Practices)	This Web site allows access to community development best practices.	Best Practices.	http://www.hud.gov/ptw/menu.html	Government to Business	Information Dissemination
CPD	Disaster Recovery Grant Reporting System	This Web site allows user to access this system from the Web. It facilitates the collection of Disaster Recovery Plan information.	Collects Disaster Recovery Plan information.	http://www.hud.gov/DSSTRCVR/dsgrstar.html	Government to Business	Transactions (end-to-end completed electronically)
CPD	EZ/EC Locator	This Web site allows searches to determine if an address is within a EZ/EC.	Determine if an address is in an EZ/EC.	http://www.hud.gov/ezec/locator/	Government to Business	Information Dissemination
CPO	Contract Café	This Web site provides contracting information for Program Offices includes electronic templates; document samples and online training for GTR's.	Information about contracting for Program Offices.	http://hudweb.hud.gov/po/arc/arcafe.htm	Government to Employee	Information Dissemination
CPO	Contract Connection	This Web site provides contracting information for HUD's contracting staff.	Information about contracting for HUD's contracting staff.	http://hudweb.hud.gov/po/arc/arconnect.htm	Government to Employee	Information Dissemination
CPO	Contracting Web site	This Web site provides information; handbooks, Regulations; samples; downloadable files, listservs etc. for contractors.	Information about contracting.	http://www.hud.gov/cts/ctshome.html	Government to Business	Information Dissemination
FHEO	Title Eight Automated Paperless Office Tracking System (TEAPOTS)	This Web site provides a link to TEAPOTS which is the automated case management systems that allows the processing of complaints and compliance reviews, as well as tracking those activities.	Information about Title Eight activities.	http://www.hud.gov/fhe/teapots.html	Government to Employee Government to Business	Transactions (end-to-end completed electronically)

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FHEO	Online Housing Discrimination Intake	This online process allows anyone with access to a computer or to one of the many HUD kiosks located throughout the country to file a claim.	Claims of Housing Discrimination.	http://www.hud.gov/hdiscrim.html	Government to Citizen	Transactions (end-to-end completed electronically)
FPM	Community Builders Information System (CoBI)	The CoBI is a suite of Lotus Notes based tools specifically designed for Community Builder use. Each CB submits workplans for approval by the Sr. CB. Other suites within the CoBI include: CB Directory, CB Exchange, CB Survey, CB Feedback, CB HUDWeb.	Information about workplans, Community Builder's program overview and contact information, best practices, current surveys, feedback, and the HUDWeb FPM page.	N/A	Government to Employee	Transactions (end-to-end completed electronically)
FPM	HUD Community Builders	Designed to inform the public about Community Builders and their activities.	Shares information about Best Practices via the CB on the Front Line newsletter and has a directory of the CB's across the country. This allows a person or group to contact their local CB by phone or e-mail.	http://www.hud.gov/cb/combuild.html	Government to Citizen Government to Government Government to Business	Information Dissemination
GNMA	Issuer Information System/Bulletin Board System	Allows issuers of Ginnie Mae's mortgage backed securities to report their data electronically.	Information for Issuers- the backbone of Ginnie Mae's MBS programs.	http://www.ginniemae.gov/issuers/issuers.htm	Government to Business	Transactions (end-to-end completed electronically)
GNMA	Web EDI	Online system used by GM issuers to submit quarterly reports electronically.	Providing a low-cost alternative for low loan volume trading partners. Online submission of Quarterly loan levels.	https://www.ginniemae.gov/web_edi/home.htm	Government to Business	Transactions (end-to-end completed electronically)
GNMA	GinnieNET 2020	GinnieNET 2020 is Ginnie Mae's primary network for conducting business with its customers. System provides online transactions processing between issuers/investors and GNMA.	Provides online transactions processing and reporting between issuers/investors and GNMA.	https://www.ginniemae.gov	Government to Business	Transactions (end-to-end completed electronically)

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GNMA	Ginnie Mae Multifamily Database	This Web site provides access to information about Ginnie Mae's Mortgage Backed Securities at the loan and the security level.	Information on Multifamily loans backing Ginnie Mae securities.	http://www.ginniemae.gov/multi/mf_db.htm	Government to Business	Information Dissemination
GNMA	Ginnie Mae Portfolio Analysis Database (GPADs)	GPADs is a Web-based internet application which enhances the access to and delivery of government information between agencies. GPADS provides the federal housing agencies with several functional capabilities relating to SFH lending/servicing.	Single Family Housing lending and servicing information.	N/A	Government to Business	Information Dissemination
HSG	FHA Connection	FHA Connection is an Internet-based umbrella portal that allows FHA approved lenders to transact business with real-time access to several of FHA's systems for the purpose of originating and servicing FHA loans.	Information for lenders to originate a loan: requesting and updating a case number, recording appraisal and mortgagor insurance information, reassigning appraisers, changing borrower, requesting duplicate Mortgage Insurance Certificate; submitting deals.	http://www.hud.gov/fha/connect.html	Government to Business	Transactions (end-to-end completed electronically)
HSG	Online Submission of Housing Counseling Annual Report Form (FORM 9902)	This Web site allows approved Housing Counseling Agencies who are also HUD grantees to submit their annual report form via the Internet vs. paper/by mail.	Allows HUD to receive form 9902 electronically.	http://www.hud.gov/tools.html	Government to Business	Transactions (end-to-end completed electronically)
HSG	Multifamily Delinquency and Default Report System (MDDR)	The MDDR system allows lenders the ability to submit delinquency and default notices to HUD via the Internet and allows HUD staff the ability to track and assess loans that are in default status.	Lenders provide HUD with information regarding delinquency and default information.	http://hudweb.hud.gov/po/h/hm/mddr/mddr_home.htm	Government to Business	Transactions (end-to-end completed electronically)

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HSG	Neighborhood Watch	<p>Neighborhood Watch is intended to aid HUD/FHA staff in monitoring lenders and our programs and later will aid lenders in self-policing the industry. The system is designed to highlight exceptions, so that potential problems are readily identifiable.</p> <p>The system gives you the ability to identify and analyze patterns, by geographic area or originating lender, in loans which became 90 days delinquent during their first two years. It has been added to the FHA Connection.</p>	Demographic or statistical Loan information about delinquencies.	https://entp.hud.gov/sfnw/nw/	Government to Employee	Transactions (end-to-end completed electronically)
HSG	Real Estate Management System (REMS)	This Web site allows access to the database of critical information on multifamily housing projects. Allows you to manage a portfolio of properties.	Information about Multifamily Properties.	http://www.hud.gov/fha/mfh/rem/rem.html	Government to Business	Transactions (end-to-end completed electronically)
HSG	Single Family Data Warehouse	This Web site allows HUD staff access to the Single Family Data Warehouse to query data from automated FHA single family HSG systems.	Information about Single Family FHA.	http://hudwebapps4.hud.gov/po/h/sfdw/	Government to Employee	Information Dissemination
HSG	SPIRUT Data Warehouse	Provides Housing Field Office and Headquarters management with the capacity to perform trend analysis, assess staff utilization and workload distribution, and facilitate the estimation of staffing and program costs.	Consolidates organization, staff profile, available skills indicators, personnel services costs, and workload indicators in an easily accessed repository.	http://hudwebapps4.hud.gov:80/po/h/spirut/prod/f37a100.cfm	Government to Employee	Query Capability of an extensive Database

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HSG	Tenant Rental Assistance Certification System (TRACS)	TRACS consists of 3 primary business systems: Contract Business System, Tenant Business System, Voucher Payment Business System. Data can be downloaded and e-mails can be sent from this Web site.	N/A	http://www.hud.gov/fha/mfh/trx/html/trxsum.html	Government to Business	Transactions (end-to-end completed electronically)
HSG (MF)	Active Partners Performance System (APPS)	The Active Partners Performance System (APPS) is a HUD system that allows HUD's business partners to submit their Previous Participation Certification (form 2530) via the Internet.	Form that allows Business Partners to submit acknowledgement of their previous participation in Multifamily Programs information.	http://www.hud.gov/fha/mfh/apps/appsmfhm.html	Government to Business	Transactions (end-to-end completed electronically)
HSG (MF)	Multifamily Housing Secure Systems	This Web site provides online access to multifamily housing secure systems.	Link to all multifamily housing secure sitemaps.	http://hudapps.hud.gov/ssmaster/index.cfm	Government to Business	Transactions (end-to-end completed electronically)
HSG (SF)	FHA Homeowner Refunds Web Site	This Web site allows homeowners to search by name or FHA case number to determine if HUD owes them a refund. If their name is found, instructions are given with a toll-free number to call for more information.	Owners' names, property addresses, amount of refund due and the payoff date of the loan.	http://www.hud.gov/fha/comp/refunds/page1.html	Government to Citizen	Information Dissemination
HSG (SF)	Maximum mortgage limits Web Site	This Web site allows the user to look-up the FHA maximum mortgage limit for several areas and replaces lender notification by mailing notification via paper Mortgagee Letters.	Information about FHA maximum mortgage limits.	https://entp.hud.gov/idapp/html/hicostlook.cfm	Government to Citizen	Information Dissemination
HSG (SF)	HUD Approved Appraiser Search Web Site	This Web site allows the user to search for appraisers by location, name, license or status. Search to find specific types of appraiser by using the pull down menus and entry fields.	Information about HUD approved appraisers.	https://entp.hud.gov/idapp/html/apprlook.cfm	Government to Citizen	Information Dissemination

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HSG (SF)	HUD Approved Condos Web Site	This Web site allows users to search for condominium project by location, name, or status.	Information about HUD approved condos.	https://entp.hud.gov/idapp/html/condlook.cfm	Government to Citizen	Information Dissemination
HSG (SF)	HUD Planned Unit Developments (PUD) Web Site	This Web site allows users to search for PUDs by location, PUD ID, name or status.	Information about planned unit developments by location, PUD ID, name or status.	https://entp.hud.gov/idapp/html/subdivlook.cfm	Government to Citizen	Information Dissemination
HSG (SF)	Electronic Bidding for HUD Homes	This Web site allows users to view information about HUD homes for sale. Brokers can submit bids for HUD homes online.	Information about HUD homes for sale.	http://www.hud.gov/homesale.html/http://www.hud.gov/local/sams/ctznhome.html	Government to Business	Transactions (end-to-end completed electronically)
HSG (MF)	Section 8 Expiring Contracts Database	This Web site provides access to the Section 8 Expiring Contracts DB which lists of all Section 8 contracts to provide HUD partners/clients with a way of measuring the potential impact of expiring project-based subsidy contracts in their communities.	Information is a database of section 8 contracts that are expiring.	http://www.hud.gov/fha/mfh/mfhdiscl.html	Government to Business	Information Dissemination
Office of the Secretary	Community Builders Information Tracking System	HR staff track job applications.	Information from job applicants.	http://nthhqp24.hud.gov/po/arh/cb_release/main/logon.cfm	Government to Employee	Transactions (end-to-end completed electronically)
Office of the Secretary	HUD's Super Notice of Funding Availability (SuperNOFA)	This Web site provides an online listing of available HUD grants.	Information about HUD grants.	http://www.hud.gov/fundsavl.html	Government to Business	Information Dissemination
Office of the Secretary	Request Web Brochures online	This Web site provides forms to request supplies for marketing www.hud.gov to the public.	Information about supplies to market www.hud.gov to the public.	http://hudweb.hud.gov/webinc/broch.cfm	Government to Employee	Transactions (end-to-end completed electronically)

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Office of the Secretary	Kiosk Requests and Schedule online	This Web site provides the kiosk schedule and allows users to send online request to use kiosk.	HUD Kiosk information.	http://lnshhq05P.hud.gov/Kiosk/Kiosk_Scheduling.nsf/(\$Calendar)?OpenView&Grid=4	Government to Employee	Transactions (end-to-end completed electronically)
Office of the Secretary	Next Door - HUD Kiosks	Easy-to-use kiosks are placed in public spaces bringing HUD to the people. Easy-to-use computers with free access to the Internet are in every HUD office and storefront.	Information about HUD and its programs.	N/A	Government to Citizen	Information Dissemination
Office of the Secretary	Homes and Communities Page - Internet based	The Homes and Communities page is designed as a clearing house of information and services for citizens and business partners, organized and articulated in ways that make sense to them.	Information about HUD products and services.	http://www.hud.gov	Government to Citizen Government to Business Government to Government Government to Employee	Information Dissemination
Office of the Secretary	HUD Answering Machines	HUD Answering Machine gives the public access to HUD's Web site, where you can learn about mortgages, file a housing complaint online, or browse the HUD reading room.	Information about HUD and its programs.	N/A	Government to Citizen	Information Dissemination
Office of the Secretary	HUDWEB	HUD's Intranet. This Intranet provides HUD staff with internal information about HUD programs, services, and provides access to some of HUD's system.	Information about HUD, its programs, and its systems.	http://hudweb.hud.gov	Government to Employee	Information Dissemination Transactions (end-to-end completed electronically)

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OGC	Electronic Freedom of Information Act (EFOIA) Initiatives	The EFOIA Web site provides the texts of the FOIA and Privacy Acts, HUD's Annual FOIA report to Congress, HUD's FOIA Regulations and FOIA Handbook, agency policy statements and staff manuals.	Information about the FOIA.	http://www.hud.gov/ogc/bshelf2a.html	Government to Citizen	Information Dissemination
OMHAR	Mark to Market (M2M) MIS System	This Web site provides access to OMHAR's M2M application which tracks property assignments through rent reduction and debt restructuring process.	Information about property assignments.	http://www.hud.gov/omhar/mhrrsystm.html	Government to Business	Transactions (end-to-end completed electronically)
PA	Public Affairs Publication Record Web Site	This Web site allows users to complete and submit a form for documents that will be published within 90 days.	Information about publishing documents.	http://hudweb.hud.gov/po/w/recform.htm	Government to Employee	Forms only
PD & R	HUD USER	Online comprehensive bibliographic database, publications, newsletters, and datasets, such as HUD median family income limits, fair market rents, low income housing tax credits; census tracts. Publications can be ordered online through the use of Cyber Cash Secure Internet Payment System. Also offers weekly listserv to keep participants abreast of latest resources and Fax Back service via telephone for highly requested information like median income limits.	Information about HUD research.	http://www.huduser.org	Government to Citizen Government to Government Government to Business	Information Dissemination

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PD & R	State of the Cities Data System	This Web site provides access to State of the Cities Data System.	Information from the State of the Cities Data System.	http://webstage1.aspensys.com/SOCDS/SOCDS_Home.htm	Government to Citizen Government to Government Government to Business	Information Dissemination
PIH	Economic Development and Supportive Services Internet Submission Subsystem (ED/SS)	The ED/SS application allows current grantees to submit performance reports over the Internet.	Performance Reports.	http://www.hud.gov/pih/systems/ibs/edss/edss_app.html	Government to Business	Transactions (end-to-end completed electronically)
PIH	Housing Authority Finance Internet Submission System (HAFISS)	HA Finance Internet Submission System allows current Housing Authorities to submit Form 52599 statements over the Internet for Low Rent Housing, Turnkey III Housing, and Section 23 Housing.	Form 52599.	http://www.hud.gov/pih/systems/ibs/ha_finance/ha_fintro.html	Government to Business	Transactions (end-to-end completed electronically)
PIH	Multifamily Tenant Characteristics System (MTCS)	The MTCS collects, stores, and generates reports on families who participate in public housing, Indian housing, and Section 8 rental subsidy programs.	Form 50058.	http://www.hud.gov/pih/systems/mtcs/pihmtcs.html	Government to Business	Transactions (end-to-end completed electronically)
PIH	Public Housing Agency (PHA) Plans on the WEB	This Web site allows plans to be FTP'd from PHAs and can be reviewed online.	PHA Plans.	http://www.hud.gov/pih/pha/plans/phaps-home.html	Government to Business	Transactions (end-to-end completed electronically)
PIH	Public Housing Drug Elimination Program (PHDEP) Semi-Annual Performance Reporting System	The purpose of the PHDEP Semi-Annual Performance Report is to measure grantees progress in achieving their program goals. This will be used by HUD staff in monitoring PHDEP grants.	Public Housing Drug Elimination Program.	http://www.hud.gov/pih/systems/ibs/phdep/phdepintro.html	Government to Business	Transactions (end-to-end completed electronically)

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PIH	PIH Information Center (PIC)	PIC is an Internet based approach which enable Housing Authority users and HUD personnel to access a common database of Housing Authority info. PIC sub-modules include: HA/DEV/FCR, DERS, HA Unit Inventory/Waiting List, SAC, Native eDGE, ETS, FHDEP Formula, PHA Plans, SEMAP, MTCS, Security/Database Admin. NAHASDA/ONAP - submodules include Indian Housing Plan (IHP), Annual Performance Report (APR), NativeEdge. Grant recipients can submit annual plans and reports to ONAP staff for review, tracking, and approval as part of the Electronic Office initiative.	Public and Indian Housing Information.	http://www.hud.gov/pih/systems/pic/pichome.html/http://hudweb.hud.gov/po/p/systems/pic/index.htm	Government to Business	Transactions (end-to-end completed electronically)
PIH	Section 8 HUDCAPS	Access accounting program for Section 8 housing.	Section 8 HUDCAPS information.	http://hudweb.hud.gov/po/p/systems/hudcaps	Government to Business	Information Dissemination
PIH (ONAP)	CodeTalk	Code Talk is a federal inter-agency Native American Web site that provides information for Native American communities. Code Talk is by hosted by HUD and ONAP. Provides information, ONAP Online Training; Submit Indian Housing Plans (IHP) and Annual Performance Reports (APR) online.	Information for Native Americans.	http://www.codetalk.fed.us	Government to Business Government to Citizen	Information Dissemination
REAC	Real Estate Assessment Center (REAC)	REAC's mission is to improve housing quality and assure public trust by providing accurate, credible and reliable assessments of HUD's portfolio, identifying risks and providing opportunities for solutions, and working with program partners.	Assessment Information.	http://www.hud.gov/reac	Government to Business	Transactions (end-to-end completed electronically)